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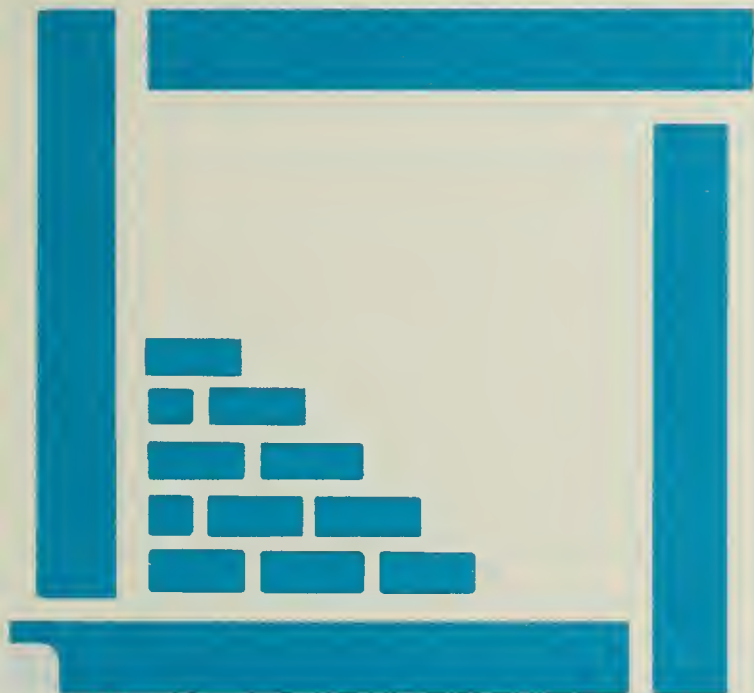
# Census of Construction Industries

CC87-A-7

GEOGRAPHIC AREA SERIES

## West South Central States

Arkansas, Louisiana, Oklahoma, Texas



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Many persons participated in the various activities of the 1987 Census of Construction Industries.

The overall planning and review of the census operations were performed by the staff of the Office of the Assistant Director for Economic and Agriculture Censuses.

This report was prepared in the Construction Statistics Division. **Barry A. Rappaport**, Assistant Division Chief for Industry Surveys, was responsible for the overall planning, management, and coordination of the census of construction industries. Planning and implementation were under the direction of **A. William Visnansky**, Chief, Census Operations Branch, with primary staff assistance by **Juliana Van Berkum**, **Barbara J. Hadden**, **Edward R. Glover**, **Susan L. Hostetter**, **Shirley M. Baker**, and **Carolyn J. Stone**. Under the direction of **Jesse Pollock**, **Edward K. Ricketts** and **Dennis K. Duke** developed the sampling plans and variance and estimation specifications.

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Special acknowledgment is also due the many businesses whose cooperation has contributed to the publication of these data.

If you have any questions concerning the statistics in this report, call (301) 763-7546.

# **1987**

# **Census of Construction Industries**

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CC87-A-7

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## **West South Central States**

Arkansas, Louisiana, Oklahoma, Texas

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Issued July 1990



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## PURPOSE AND USES OF THE ECONOMIC CENSUSES

The economic censuses are the major source of facts about the structure and functioning of the Nation's economy. They provide essential information for government, business, industry, and the general public.

*Economic censuses furnish an important part of the framework for such composite measures as the gross national product, input-output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.*

*Policy-making agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.*

*State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.*

*Trade associations study trends in their own and competing industries, and keep their members informed of market changes.*

*Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.*

## AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic censuses every 5 years, covering years ending in 2 and 7. The 1987 Economic Censuses consist of the—

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Transportation
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1987 Census of Agriculture and 1987 Census of Governments are conducted separately.) The next economic censuses are scheduled to be taken in 1993 covering the year 1992.

## AVAILABILITY OF THE DATA

The results of each of the economic censuses are available in printed reports, for sale by the U.S. Government Printing Office, and on microfiche, computer tape, compact discs with read-only memory, and flexible diskettes, for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Census Bureau, Washington, DC 20233. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State Data Centers in every State and Business and Industry Data Centers in many States also supply economic census statistics.

## WHAT'S NEW IN 1987

Several changes have taken place for the 1987 censuses. Data will be reported on the basis of the newly revised Standard Industrial Classification (SIC) system with selected reports including "bridge tables," linking the old and new classification systems. A new set of metropolitan



areas has been adopted, and more detailed information will be available for businesses with no paid employees. For additional information on these changes, review the subsequent text.

One important change involves receipts of contractors and builders. Prior to 1987, the Census of Construction Industries collected receipts as the primary measure of construction activity. For 1987, the census collected the "value of construction work done" to better measure actual construction activity done during the year. Differences between the two concepts occur when work is done in one year and payment received either from the prior or in the succeeding year. In addition, receipts do not include work a contractor performs for its own account and use.

## **HISTORICAL INFORMATION**

The economic censuses have been taken together as an integrated program at 5-year intervals since 1967, and before that for 1963, 1958, and 1954. Prior to that time, the individual censuses were taken separately at varying intervals.

The economic censuses trace their beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 manufactures census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade, and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 economic censuses were the first to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. These were the first censuses to be taken by mail, using lists of firms provided by the administrative records of other federal agencies. Since 1963, administrative records have also been used to provide basic statistics as well for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic censuses, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The Census of Construction Industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The Census of Transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks. New for 1987 are publications reporting on business establishments engaged in several transportation industries, paralleling the data on establishments in

other sectors. This is part of a gradual expansion in coverage of industries previously subjected to government regulation. The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic censuses in 1972 along with the Survey of Women-Owned Businesses.

Economic censuses have also been taken in Puerto Rico since 1909, in the Virgin Islands and Guam since 1958, and in the Northern Mariana Islands since 1982.

Statistical reports from the 1982 and earlier censuses provide historical figures for the study of long-term time series, and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

## **AVAILABILITY OF MORE FREQUENT ECONOMIC DATA**

While the censuses provide complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, the results of which appear in publication series such as *Current Construction Reports* (building permits, housing starts, and value of new construction put in place), *Current Business Reports* (retail and wholesale trade and service industries), the *Annual Survey of Manufactures*, *Current Industrial Reports*, and the *Quarterly Financial Report*. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the censuses. The *County Business Patterns* program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

## **SOURCES FOR MORE INFORMATION**

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1987 Economic Censuses and Related Statistics*. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1987 Economic Censuses*. Contact Customer Services for information on availability.

## **CENSUS OF CONSTRUCTION INDUSTRIES—SCOPE AND CLASSIFICATION**

The 1987 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property



into lots as defined in the 1987 Standard Industrial Classification (SIC) Manual.<sup>1</sup> This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

**Contract construction**—The SIC manual defines construction in three broad types of activity that follow:

1. **Building construction by general contractors or by operative builders**—General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors**—Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors**—These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

In addition to the industries classified in the SIC manual as Construction, this census also includes one industry

classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. These establishments are engaged in subdividing real property into lots and in developing it for sale on their own account.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1987. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry, but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

A revised edition of the SIC Manual was issued in 1987. Minor modifications were made to three industries in the construction sector: SIC 1611, Highway and Street Construction Contractors, Except Elevated Highways; SIC 1629, Heavy Construction Contractors, N.E.C.; and SIC 1771, Concrete Work Special Trade Contractors. The extent of these modifications are explained in the specific texts for those industries. "Bridge tables" are also included showing selected data tabulated using both the previous classification system and the 1987 revision.

## ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each such establishment operated during all or any part of 1987. The census of construction industries figures represent a summary of records for individual establishments rather than for companies. The census tabulations, therefore, differ from those prepared on a company basis.

<sup>1</sup>Standard Industrial Classification Manual: 1987. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.



If an establishment engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report appropriate to each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1987 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1987 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

## **SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES**

The companies included in the 1987 Census of Construction Industries were identified as part of an operation common to all 1987 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on them were obtained from administrative records of other agencies of the Federal Government.

### **Employer Companies**

**Developing the sampling frame for employer companies**—This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative records data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1987 Economic Censuses the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1987 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

**Selecting the employer sample**—The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with estimated total employment of 20 employees or more, and a probability sample of single-establishment companies with estimated employment of fewer than 20 employees.

Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 533,000 single-establishment employer companies initially classified as construction companies, 147,000 were included in the sample. All of the 13,000 establishments of multiestablishment companies were included in the sample. There was a net increase in the sample of 60,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan



area or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

#### Estimation procedures for 1987 and 1982 data—

Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1987 and 1982 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c}$$

where:  $x'_c$  is the simple unbiased estimate of a characteristic for a publication cell.

$x_i$  is the reported value of a characteristic for an individual establishment in the publication cell.

$p_i$  is the selection probability of that firm.

$n_c$  is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

**Reliability of employer statistics**—Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used.

The relative standard error is a measure of sampling variability, i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the

sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

#### Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched, were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts", referred to in the tables as "dollar value of business done", was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.



## CENSUS REPORT FORMS

Information for the 1987 Census of Construction Industries was obtained from employer establishments primarily through the use of twenty-four questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179 and for the establishments classified in SIC 6552. Establishments with 50 or more employees all received the standard form. A sub-sample of establishments with fewer than 50 employees received short forms instead of the standard forms. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and appropriate advisory groups. The Bureau surveyed several thousand firms representing all economic activities to gain insight into the way companies maintain records and to see whether new information could be collected.

## DATA PROCESSING

The 1987 census report forms were mailed out in December 1987. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, Ind., where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1988.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group)-State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all

revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

## GEOGRAPHIC CLASSIFICATION

Information for the 1987 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical locations of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

## DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census, contains varying amounts of duplication, since the construction work of one firm may be subcontracted to other construction firms and also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries, results from the use of products of these other industries as input materials by construction establishments. "Value added," avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added," is defined in the 1987 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels. However, for SIC 6552 and SIC 1531 where land receipts are significant, land receipts are also subtracted from dollar value of business done.

## SPECIAL TABULATIONS

Special tabulations of data collected in the 1987 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Construction Statistics Division, Bureau of the Census, Washington, DC, 20233.



To discuss a special tabulation before submitting specifications, call 301-763-7546.

## COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1987 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity, whereas the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the Census of Construction.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics, and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

## ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

*	Sampling error exceeds 40 percent.
**	Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
-	Represents zero.
†	Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
††	Represents dollar value of business done less costs for construction work subcontracted to others, and costs for materials, components, supplies, and fuels. In SIC's 1531 and 6552, land receipts are also subtracted from dollar value of business done. (See Duplication in Value of Construction Work.)
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
(W)	Greater than zero but less than 1 percent.
(X)	Not applicable.
n.s.k.	Not specified by kind.

# Users' Guide for Locating Statistics in This Report by Table Number

Statistics	By State	By Industry	By employment size	By size class of the dollar value of business done	By type, class, ownership, kind of business, and location of construction <sup>1</sup>	By CMSA, PMSA, and MSA <sup>2</sup>
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery and equipment .....	5					
End of year—total .....	3, 5	3	7	8		
End of year—buildings, machinery and equipment .....	5					
Depreciation charges during year— buildings, machinery and equipment .....	5					
Capital expenditures:						
Total capital expenditures .....	3, 5	3	7	8		12
New buildings—machinery and equipment .....	5					
Used buildings—machinery and equipment .....	5					
Communication services, payments for .....	4					
Employees:						
All employees—average number .....	3	3	7	8		12
Construction workers—average number .....	3, 4, 10	3, 10				
Other employees—average number .....	4					
Employer costs for fringe benefits—legally required and voluntary expenditures .....	4					
Establishments:						
Number in business at end of year .....	4					
Number in business during year:						
All .....		1		2		
With payroll .....	3, 4, 6, 10	1, 3, 10	7	2, 8		12
Without payroll .....		1		2		
Hours—construction workers:						
Total .....	3, 4, 10	3, 10	7	8		
Quarterly .....	4, 10	10				
Inventories .....	6					
Materials, components, supplies, and fuels—payments for .	3, 4	3	7	8		12
Payroll:						
First quarter, all employees .....	4					
Annual:						
All employees .....	3, 4	3	7	8		12
Construction workers .....	3, 4	3				
Other employees .....	4					
Power, fuels, and lubricants—payments for .....	4					
Proprietors and working partners:						
All establishments .....		1		2		
Establishments with payroll .....	4	1		2		
Establishments without payroll .....		1		2		
Ratios, industry .....	11	11				
Receipts:						
Dollar value of business done:						
All establishments .....		1		2		
Establishments with payroll .....	4	1	7	2, 8		
Establishments without payroll .....		1		2		
Value of construction work, total .....	3, 4, 6	3	7	8	4, 9,	12
For work subcontracted in from others .....	4					
Other business receipts .....	4					
Land receipts <sup>3</sup> .....	4					
Net value of construction work .....	3, 4	3	7	8		12
Value added .....	3, 4	3	7	8		12
Rental payments:						
Total .....	3, 4	3	7	8		
For machinery and equipment .....	4					
For buildings .....	4					
Repairs to buildings and other structures .....	4					
Repairs to machinery and equipment .....	4					
Subcontract work to others, payments for .....	3, 4	3	7	8	12	

Note: Data for 1982 and earlier years are also available in some of these tables.

<sup>1</sup>Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work. Ownership—private or government owned.

<sup>2</sup>CMSA—Consolidated metropolitan statistical area; PMSA—Primary metropolitan statistical area; MSA—Metropolitan Statistical area.

<sup>3</sup>Land receipts are shown separately for SIC's 1531 and 6552 only.



REGIONS AND CENSUS DIVISIONS OF THE UNITED STATES



\* The Midwest Region was designated as the North Central Region until June 1984.



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## Arkansas

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# SUMMARY OF FINDINGS

This report provides results from the 1987 Census of Construction Industries for Arkansas. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property into lots, as defined in the 1987 Standard Industrial Classification (SIC) Manual. The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters. In addition, this census also includes one industry classified under "Real Estate" in the Manual, SIC 6552, Land Subdividers and Developers, Except Cemeteries.

During 1987, there were 23,160 establishments in this State operating in the construction industries or as land subdividers and developers. These establishments accounted for \$3.2 billion in total value of business done.

Most of the 23,160 construction establishments were small. Of the total, 18,987 were nonemployers, and over half of the employer establishments had less than 5 employees. The 1,645 construction establishments with 5 employees or more, while representing only 7 percent of all establishments, accounted for more than 67 percent of the total value of business done.

## ESTABLISHMENTS WITH PAYROLL

During 1987, the establishments with paid employees accounted for \$2.5 billion on total dollar value of business done. Of this amount, \$2.4 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$550 million, leaving net value of construction work of \$1.9 billion. In addition, these establishments paid out \$968 million for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1987 was \$1.0 billion. (See Introduction and appendixes for explanation of terms.)

There were 4,173 establishments with total employment averaging 30,434 during the year. Total payroll for 1987 was \$502 million. Total hours worked by construction workers during the year were 42.0 million hours.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

In 1987, the value of construction work was collected to better measure actual construction activity done during the year. Construction receipts, as reported in earlier censuses, may have included the value of work done before or after the calendar year and may have also excluded work done by builders for their own use. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

## ESTABLISHMENTS WITHOUT PAYROLL

During 1987, there were 18,987 establishments with no payroll classified as construction or land subdividers and developers. According to administrative records of the Federal Government, their value of business done during 1987 was \$671 million. Most of these establishments, about 76 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in tables 1 and 2 of this report.

Figure 1. **Selected Costs Per Dollar Value of Business Done**  
(Percent)

1987   
1982 

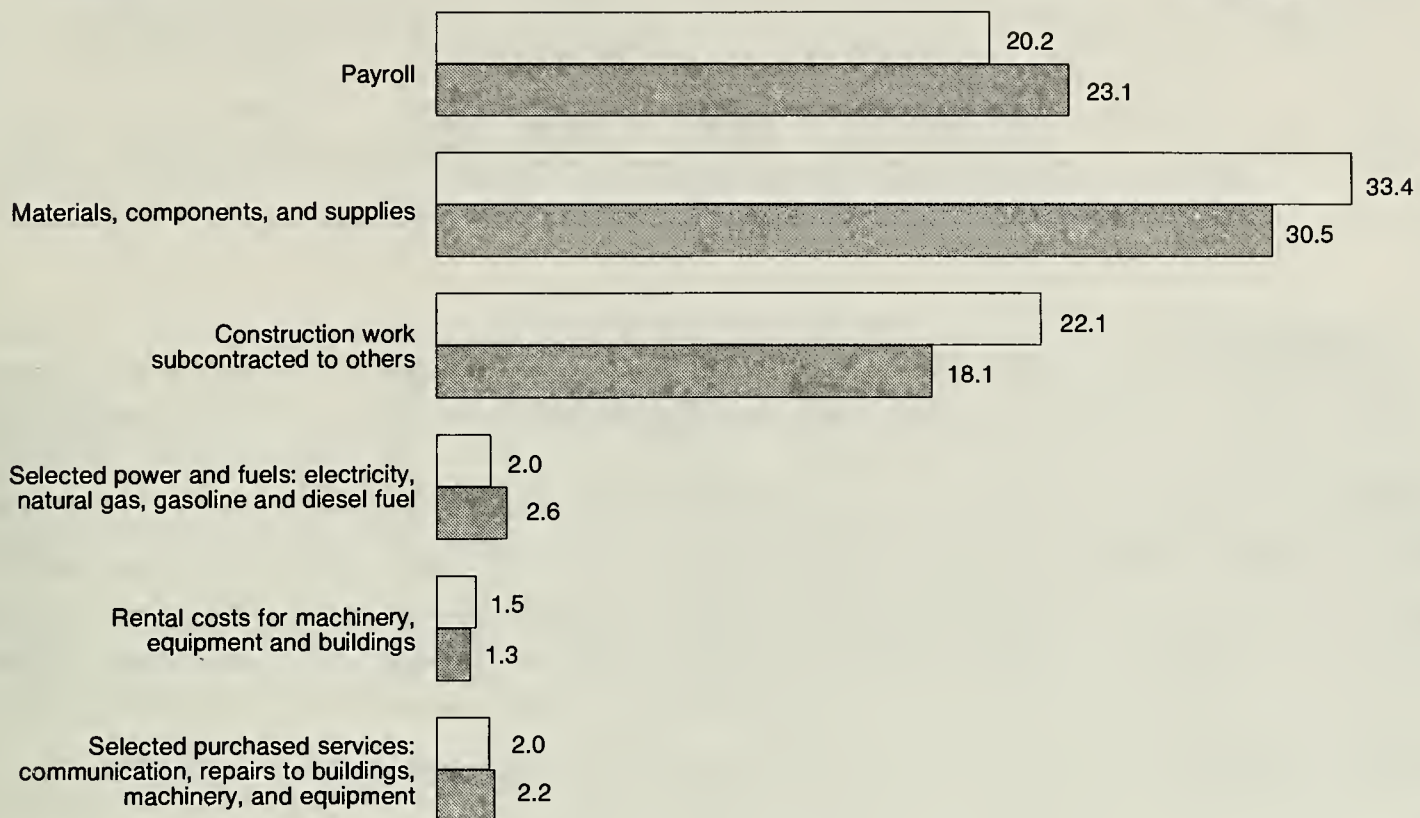
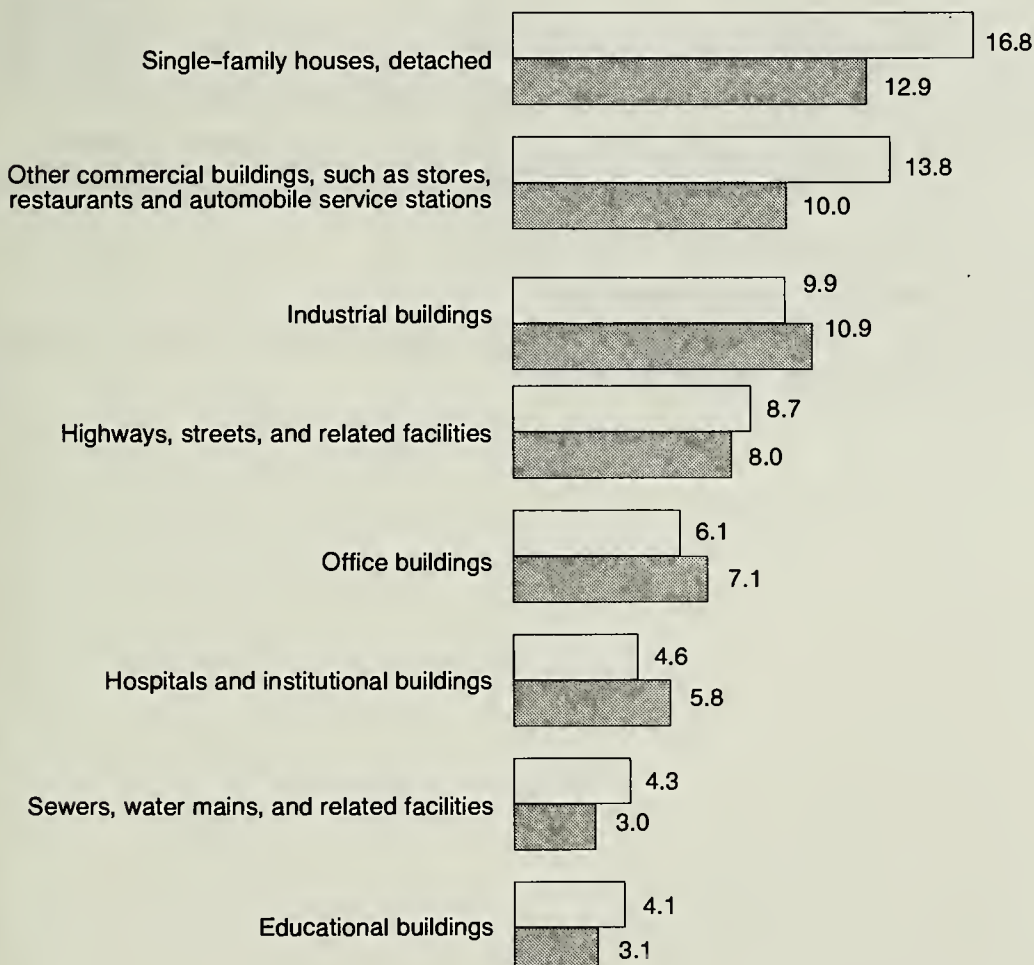


Figure 2. **Value of Construction Work by Type of Construction**  
(Percent)

1987   
1982 





**Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprie- tors and working partners	All em- ployees**	Dollar value of business done	Number	Proprie- tors and working partners	Dollar value of business done	Number	Proprie- tors and working partners	All em- ployees**	Dollar value of business done¹		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1987													
	Construction Industries and land subdividers and developers .....	23 160	19 992	30 434	3 154 264	18 987	18 829	670 738	4 173	1 163	30 434	2 483 528	2	2
15, 16, 17	Construction Industries .....	22 666	19 577	30 276	3 083 057	18 556	18 427	627 291	4 110	1 150	30 276	2 455 766	2	1
15	Building construction—General contractors and operative builders .....	4 797	3 813	(D)	1 279 328	3 711	3 531	259 336	1 086	282	(D)	1 019 992	(D)	3
16	Heavy construction other than building construction— contractors .....	836	477	6 110	556 688	382	373	20 042	454	104	6 110	536 644	3	3
17	Special trade contractors .....	17 033	15 287	(D)	1 247 043	14 463	14 523	347 913	2 570	764	(D)	899 130	(D)	3
1711	Plumbing, heating, and air-conditioning ..	1 946	1 499	3 763	310 393	1 312	1 319	45 333	634	180	3 763	265 060	5	5
1731	Electrical work .....	1 236	907	2 729	193 139	821	820	33 339	415	87	2 729	159 800	5	4
6552	Land subdividers and developers, n.e.c.² .....	488	409	147	71 198	431	402	43 445	57	7	147	*27 753	19	42
	1982													
	Construction Industries and land subdividers and developers .....	17 021	14 518	28 577	2 144 038	13 157	13 128	341 015	3 864	1 390	28 577	1 803 023	2	2
15, 16, 17	Construction Industries .....	16 727	14 319	28 084	2 109 892	12 912	12 930	327 647	3 815	1 389	28 064	1 782 245	2	2
15	Building construction—General contractors and operative builders .....	2 469	1 752	7 083	751 020	1 541	1 481	78 075	928	271	7 083	672 945	3	3
16	Heavy construction other than building construction— contractors .....	807	479	6 389	384 995	400	403	14 942	407	76	6 389	370 053	3	2
17	Special trade contractors .....	13 451	12 088	14 592	973 877	10 971	11 046	234 630	2 480	1 042	14 592	739 247	2	2
1711	Plumbing, heating, and air-conditioning ..	1 537	1 198	3 486	218 243	935	948	29 821	602	250	3 486	188 422	6	5
1731	Electrical work .....	927	731	2 261	128 583	606	607	20 520	321	124	2 261	108 063	7	6
6552	Land subdividers and developers, n.e.c.² .....	290	198	511	34 143	245	198	13 368	45	-	511	20 775	7	5

Note: Number of establishments in this and subsequent tables represent those in business at any time during the year.

¹For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.

²For establishments without payroll, may also include data for an unknown number of cemetery subdividers and developers.



**Table 2. Summary Statistics by Size Class of Dollar Value of Business Done for Establishments With and Without Payroll : 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Receipts size	All establishments				Establishments without payroll <sup>1</sup>			Establishments with payroll				Relative standard error of estimate (percent) for column—	
	Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done	Number	Proprietors and working partners	All employees**	Dollar value of business done <sup>2</sup>		
	A	B	C	D	E	F	G	H	I	J	K	J	K
<b>1987</b>													
<b>The State</b> -----	<b>23 160</b>	<b>19 992</b>	<b>30 434</b>	<b>3 154 264</b>	<b>18 987</b>	<b>18 829</b>	<b>670 736</b>	<b>4 173</b>	<b>1 163</b>	<b>30 434</b>	<b>2 483 528</b>	<b>2</b>	<b>2</b>
\$10,000,000 or more -----	23	-	2 528	414 392	-	-	-	23	-	2 528	414 392	(W)	(W)
\$5,000,000 to \$9,999,999 -----	42	2	2 496	306 984	-	-	-	42	2	2 496	306 984	2	2
\$2,500,000 to \$4,999,999 -----	130	5	4 677	444 466	3	3	11 262	127	2	4 677	433 204	3	5
\$1,000,000 to \$2,499,999 -----	377	46	6 275	570 073	28	26	37 773	349	20	6 275	532 300	5	5
\$500,000 to \$999,999 -----	536	159	4 307	384 878	109	97	73 461	427	62	4 307	311 417	7	8
 \$250,000 to \$499,999 -----	 978	 496	 4 093	 348 215	 310	 279	 105 895	 668	 217	 4 093	 242 320	 9	 8
\$100,000 to \$249,999 -----	1 977	1 251	3 705	307 880	907	876	137 480	1 070	375	3 705	170 400	8	6
\$50,000 to \$99,999 -----	(S)	(S)	(S)	(S)	1 530	1 512	106 579	(S)	(S)	(S)	(S)	(S)	(S)
\$25,000 to \$49,999 -----	(S)	(S)	(S)	(S)	2 426	2 411	86 148	(S)	(S)	(S)	(S)	(S)	(S)
 Less than \$25,000 -----	 (S)	 (S)	 (S)	 (S)	 13 674	 13 625	 112 138	 (S)	 (S)	 (S)	 (S)	 (S)	 (S)
\$10,000 to \$24,999 -----	(NA)	(NA)	(NA)	(NA)	4 625	4 596	73 812	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999 -----	(NA)	(NA)	(NA)	(NA)	3 451	3 444	25 341	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,000 to \$4,999 -----	(NA)	(NA)	(NA)	(NA)	2 412	2 402	8 856	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,000 -----	(NA)	(NA)	(NA)	(NA)	3 186	3 183	4 129	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
<b>1982</b>													
<b>The State</b> -----	<b>17 021</b>	<b>14 518</b>	<b>28 577</b>	<b>2 144 038</b>	<b>13 157</b>	<b>13 128</b>	<b>341 015</b>	<b>3 864</b>	<b>1 390</b>	<b>28 577</b>	<b>1 803 023</b>	<b>2</b>	<b>2</b>
\$10,000,000 or more -----	19	2	3 893	(D)	1	2	(D)	18	-	3 893	(D)	(W)	(D)
\$5,000,000 to \$9,999,999 -----	24	-	1 379	(D)	-	-	-	24	-	1 379	(D)	(W)	(D)
\$2,500,000 to \$4,999,999 -----	78	4	3 299	849 382	-	-	-	78	4	3 299	849 382	(W)	(W)
\$1,000,000 to \$2,499,999 -----	252	38	5 339	386 113	12	15	28 462	240	23	5 339	357 651	4	6
\$500,000 to \$999,999 -----	310	51	3 739	219 665	32	28	21 152	278	23	3 739	198 513	7	7
 \$250,000 to \$499,999 -----	 575	 210	 3 553	 203 714	 106	 88	 36 768	 469	 122	 3 553	 166 946	 7	 6
\$100,000 to \$249,999 -----	1 351	750	3 840	216 240	430	424	64 330	921	326	3 840	151 910	7	6
\$50,000 to \$99,999 -----	1 613	1 230	1 933	114 933	887	905	61 535	726	325	1 933	53 398	9	6
\$25,000 to \$49,999 -----	1 984	1 757	854	69 696	1 495	1 516	51 861	489	241	854	17 835	10	8
 Less than \$25,000 -----	 10 814	 10 476	 746	 84 294	 10 194	 10 150	 76 907	 620	 326	 746	 7 387	 8	 9
\$10,000 to \$24,999 -----	(NA)	(NA)	(NA)	(NA)	3 197	3 181	48 633	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999 -----	(NA)	(NA)	(NA)	(NA)	2 809	2 801	18 953	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,500 to \$4,999 -----	(NA)	(NA)	(NA)	(NA)	2 661	2 659	7 794	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,500 -----	(NA)	(NA)	(NA)	(NA)	1 527	1 509	1 527	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Underscored data fields include data from adjoining lines which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>For establishments without payroll, may include data for an unknown number of cemetery subdividers and developers.

<sup>2</sup>For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.

**Table 3. General Statistics for Establishments With Payroll by Industry: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	1987							
		Number of establish- ments	Employees**		Payroll		Construction worker hours (thousands)	Value of construction work	Net value of construction work†
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
	Construction industries and land subdividers and developers -----	4 173	30' 434	24 421	501 685	368 756	41 975	2 400 570	1 850 733
15, 16, 17	Construction Industries:								
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses-----	550	1 816	1 400	24 508	16 165	2 124	164 821	117 192
1522	Other residential buildings-----	43	419	310	6 900	4 125	463	54 947	34 747
1531	Operative builders-----	136	(D)	361	(D)	5 561	(D)	99 616	59 139
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses-----	39	1 017	823	20 550	15 061	1 711	85 364	55 863
1542	Nonresidential buildings, n.e.c.-----	318	4 633	3 635	78 353	54 046	6 382	571 098	305 741
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction-----	100	2 235	1 890	43 027	32 742	3 631	224 796	189 374
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction-----	13	356	306	6 223	4 917	318	46 105	32 917
1623	Water, sewer, and utility lines-----	145	1 777	1 482	28 702	22 896	3 063	125 741	111 046
1629	Heavy construction, n.e.c.-----	196	1 742	1 459	31 952	24 854	2 474	127 253	115 840
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning-----	634	3 763	2 931	67 099	48 965	5 414	261 538	238 783
1721	Painting and paper hanging-----	133	713	592	10 090	7 923	900	35 463	32 576
1731	Electrical work-----	415	2 729	2 106	47 569	35 829	3 730	157 870	151 040
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework-----	187	870	806	8 184	7 436	1 137	28 141	27 535
1742	Plastering, drywall, and insulation work-----	104	784	658	12 933	10 254	1 028	39 940	36 498
1743	Terrazzo, tile, marble, and mosaic work-----	*23	90	67	1 823	1 370	138	8 289	8 171
175	Carpentry and floor work:								
1751	Carpentry-----	213	643	581	6 544	5 429	974	24 313	21 436
1752	Floor laying and other floor work-----	50	152	121	1 877	1 459	187	6 248	5 754
1761	Roofing, siding, and sheet metal work-----	204	1 604	1 310	24 910	19 244	2 335	88 889	84 356
1771	Concrete work-----	174	1 255	1 122	14 792	11 989	1 466	61 421	56 183
1781	Water well drilling-----	55	237	169	2 937	2 054	257	16 021	15 682
179	Miscellaneous special trade contractors:								
1791	Structural steel erection-----	43	569	446	11 538	8 255	669	31 889	30 245
1793	Glass and glazing work-----	30	207	155	4 231	2 839	252	13 755	13 651
1794	Excavation work-----	97	592	487	9 012	6 685	785	37 923	31 375
1795	Wrecking and demolition work-----	10	(D)	13	(D)	105	(D)	468	407
1796	Installing building equipment, n.e.c.-----	38	524	461	9 696	7 985	781	29 613	27 826
1799	Special trade contractors, n.e.c.-----	160	852	648	12 640	9 329	1 088	41 703	40 138
6552	Land subdividers and developers, n.e.c.-----	57	147	68	2 563	1 229	122	17 334	7 209

†In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.



1987—Con.						1982			Relative standard error of estimate (percent) for column—			1987 SIC code
Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted to others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Total construction receipts¹	Value added††				
I	J	K	L	M	N	O	P	Q	B	H	M	
1 032 258	880 464	549 837	37 286	48 238	412 835	28 577	1 733 824	867 075	2	1	5	15, 16, 17
56 521 23 019	67 273 11 798	47 629 20 200	1 141 326	2 046 880	11 617 7 314	2 331 463	143 305 52 624	60 813 21 816	8 16	9 10	27 10	152 1521 1522
27 320	35 087	40 477	714	987	(D)	514	52 587	24 140	(D)	13	31	1531
29 723 170 131	27 229 157 802	29 501 265 357	1 177 6 174	748 4 084	14 310 38 981	987 2 788	81 766 327 487	33 009 107 266	8 5	7 4	16 12	154 1541 1542
99 780	97 527	35 421	6 167	9 449	93 899	1 719	103 097	51 726	5	4	10	1611
15 845 67 844 68 106	(D) 44 784 49 830	13 188 14 694 11 413	428 3 460 4 058	*1 894 5 490 7 602	8 826 47 714 50 789	425 1 791 2 454	33 870 86 331 130 079	11 922 51 796 91 828	(W) 7 10	(W) 9 9	50 21 14	162 1622 1623 1629
115 804	126 501	22 754	3 356	3 421	33 206	3 486	185 763	88 143	5	4	13	1711
24 939	7 644	*2 887	442	470	2 825	618	17 607	12 778	12	19	37	1721
82 783	70 186	6 829	1 760	2 086	18 214	2 261	106 798	56 067	5	4	21	1731
20 176 21 866 4 796	7 359 16 185 3 675	606 3 442 *118	211 557 39	*216 510 (S)	*2 751 3 546 956	936 1 105 *95	22 784 49 936 *3 499	14 831 26 408 *1 929	14 12 30	20 11 27	69 36 (S)	174 1741 1742 1743
13 241 3 713	8 283 2 405	2 877 (S)	212 *39	*421 (D)	1 591 131	456 106	14 120 4 236	7 383 2 217	25 22	16 19	55 (D)	175 1751 1752
49 455	(D)	4 533	952	1 491	11 051	1 273	61 493	33 805	9	10	23	1761
29 399	26 896	*5 237	1 486	*1 562	10 609	813	36 139	15 522	16	15	54	1771
6 317	9 573	339	(S)	*278	5 532	266	18 695	10 475	10	15	48	1781
18 806 7 688 23 579 287 20 910 24 691	11 987 8 440 7 848 (D) (D) 18 770	1 644 104 6 548 *61 1 787 1 565	458 262 1 926 (D) 892 860	*658 123 *1 579 (D) 807 335	6 352 769 14 693 (D) 4 131 6 447	362 145 1 434 (D) 250 (D)	19 030 7 107 96 631 (D) 17 130 (D)	11 719 3 415 74 446 (D) 11 566 (D)	14 16 14 (D) 9 14	16 14 12 31 6 13	48 36 41 (D) 24 30	179 1791 1793 1794 1795 1796 1799
5 512	2 069	*10 125	124	(S)	*2 825	511	12 268	9 955	19	37	(S)	6552



**Table 4. Detailed Statistics for Establishments With Payroll: 1987 and Earlier Census Years**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	1977	1972	Relative standard error of estimate (percent)			
					1987	1982	1977	1972
Number of establishments in business during year .....	4 173	3 864	5 083	4 620	1	3	3	4
Proprietors and working partners .....	1 163	1 390	3 555	3 255	7	6	5	6
All employees** .....	30 434	28 577	33 890	35 475	2	2	2	3
Construction workers:								
March .....	22 935	22 653	26 936	25 328	2	2	2	3
May .....	25 032	24 239	30 192	29 380	2	2	2	4
August .....	26 463	24 873	31 361	31 788	2	2	2	4
November .....	23 254	22 976	28 546	28 234	2	2	2	4
Average .....	24 421	24 067	29 362	29 145	2	2	2	4
Other employees:								
March .....	5 977	4 492	4 380	5 835	2	3	3	3
May .....	5 940	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
August .....	6 175	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
November .....	5 976	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Average .....	6 017	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Construction worker hours (thousands):								
January to March .....	9 375	9 455	(NA)	(NA)	2	2	(NA)	(NA)
April to June .....	10 692	10 447	(NA)	(NA)	2	2	(NA)	(NA)
July to September .....	11 613	10 852	(NA)	(NA)	2	2	(NA)	(NA)
October to December .....	10 293	9 927	(NA)	(NA)	2	2	(NA)	(NA)
Total hours worked .....	41 975	40 683	(NA)	(NA)	2	2	(NA)	(NA)
Payroll, all employees .....	501 685	416 608	313 220	236 816	1	2	1	2
Payroll, construction workers .....	368 756	336 627	254 419	180 546	1	2	2	3
Payroll, other employees .....	132 928	79 981	58 801	56 270	2	2	2	2
First quarter payroll, all employees .....	119 266	95 008	65 273	(NA)	2	2	1	(NA)
Employer costs for fringe benefits, all employees .....	87 978	73 720	48 981	(NA)	2	2	1	(NA)
Legally required expenditures .....	66 901	56 957	36 570	(NA)	2	2	2	(NA)
Voluntary expenditures .....	21 076	16 762	12 411	(NA)	3	2	2	(NA)
Dollar value of business done .....	2 483 528	1 803 023	1 522 463	1 120 217	2	2	2	4
Value of construction work <sup>1</sup> .....	2 400 570	1 733 824	1 450 938	969 519	1	2	2	4
Value of construction work subcontracted in from others .....	487 762	388 933	308 353	144 923	5	3	3	4
Land receipts <sup>2</sup> .....	20 968	13 103	(NA)	(NA)	22	5	(NA)	(NA)
Other business receipts .....	61 989	56 096	71 525	150 698	6	4	3	5
Net value of construction† .....	1 850 733	1 407 837	1 109 379	755 354	1	2	2	3
Value added†† .....	1 032 258	867 075	574 898	419 108	2	2	2	4
Selected costs .....	1 430 301	922 844	916 457	591 946	2	2	2	4
Materials, components, and supplies <sup>3</sup> .....	829 845	550 792	543 795	377 781	2	2	2	3
Construction work subcontracted to others .....	549 837	325 986	341 559	214 165	3	3	3	8
Selected power, fuels, and lubricants .....	50 619	46 066	31 103	(NA)	3	4	3	(NA)
Electricity .....	7 443	6 176	3 692	(NA)	5	7	4	(NA)
Natural gas .....	3 077	1 674	1 932	(NA)	9	5	6	(NA)
Gasoline and diesel fuel .....	36 938	34 586	21 847	(NA)	3	4	2	(NA)
On highway use .....	23 770	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Off highway use .....	13 167	(NA)	(NA)	(NA)	7	(NA)	(NA)	(NA)
Other, including lubricating oils and greases .....	3 159	3 629	3 632	(NA)	7	7	6	(NA)
Rental cost for machinery, equipment, and buildings .....	37 286	23 879	19 191	(NA)	4	4	3	(NA)
For machinery and equipment .....	27 979	19 860	16 350	12 446	5	5	3	7
For buildings .....	9 307	4 018	2 842	(NA)	5	5	6	(NA)
Selected purchased services .....	50 612	39 129	30 249	(NA)	3	3	2	(NA)
Communication services .....	10 517	9 116	6 509	(NA)	6	3	3	(NA)
Repairs to buildings and other structures .....	2 452	1 735	2 013	(NA)	12	12	9	(NA)
Repairs to machinery and equipment .....	37 641	28 277	21 727	(NA)	4	3	3	(NA)
Ownership of construction projects:								
Value of construction work .....	2 400 570	1 733 824	1 450 938	969 519	1	2	2	4
Government owned .....	574 608	362 576	261 372	297 197	5	6	2	9
Federal .....	214 584	(NA)	(NA)	(NA)	7	(NA)	(NA)	(NA)
State and local .....	360 024	(NA)	(NA)	(NA)	7	(NA)	(NA)	(NA)
Privately owned .....	1 825 961	1 371 247	1 189 566	672 322	3	2	2	4

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

<sup>2</sup>Data were collected separately for establishments classified in SIC 1531, Operative Builders and SIC 6552, Land Subdividers and Developers, Except Cemeteries. For all other industries, data are included in other business receipts.

<sup>3</sup>For 1972, includes data for power, fuels, and lubricants.

**Table 5. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	Relative standard error of estimate (percent)	
			1987	1982
<b>BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT</b>				
Beginning-of-year gross book value of depreciable assets -----	379 457	440 760	4	3
Capital expenditures, other than land -----	48 238	40 377	5	4
New -----	35 070	31 226	6	5
Used -----	13 167	9 150	12	11
Retirements and disposition of depreciable assets -----	14 860	25 471	10	6
End-of-year gross book value of depreciable assets -----	412 835	455 666	4	4
Depreciation charges during year -----	52 646	58 043	5	3
<b>Buildings and Other Structures, Additions, and Related Facilities</b>				
Beginning-of-year gross book value of depreciable assets -----	63 251	79 781	6	7
Capital expenditures, other than land -----	4 272	4 974	11	20
New buildings and other structures -----	2 258	3 842	9	18
Used buildings and other structures -----	2 013	1 132	20	28
Retirements and disposition of depreciable assets -----	3 036	1 279	14	23
End-of-year gross book value of depreciable assets -----	64 487	83 476	6	7
Depreciation charges during year -----	5 725	8 509	10	5
<b>Machinery and Equipment</b>				
Beginning-of-year gross book value of depreciable assets -----	316 206	360 979	4	4
Capital expenditures, other than land -----	43 966	35 402	6	4
New machinery and equipment, including automobiles and trucks -----	32 811	27 384	6	3
New automobiles and trucks, intended primarily for highway use -----	13 898	7 234	7	4
Used machinery and equipment, including automobiles and trucks -----	11 154	8 018	14	11
Retirements and disposition of depreciable assets -----	11 824	24 191	12	6
End-of-year gross book value of depreciable assets -----	348 347	372 190	4	4
Depreciation charges during year -----	46 921	49 533	5	3

**Table 6. Value of Inventories for Establishments With Payroll: 1987 and 1986**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number .....	4 173	1
Value of construction work .....	2 400 570	1
Establishments with inventories:		
Number .....	1 349	6
Value of construction work .....	1 001 093	4
Inventories <sup>1</sup> :		
End of 1987, materials and supplies .....	27 549	7
End of 1986, materials and supplies .....	29 049	9
Establishments with no inventories:		
Number .....	1 908	5
Value of construction work .....	986 222	4
Establishments not reporting:		
Number .....	916	8
Value of construction work .....	413 255	6

<sup>1</sup>Inventories at cost or market prior to any adjustment to correct to LIFO values.



**Table 7. Selected Statistics for Establishments With Payroll by Employment Size Class: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
<b>1987</b>										
Number of establishments .....	4 173	(S)	840	489	244	50	22	-	-	-
All employees** .....	30 434	(S)	5 393	6 580	7 347	3 355	3 074	-	-	-
Payroll, all employees .....	501 685	(S)	71 074	108 457	137 778	62 623	64 266	-	-	-
Construction worker hours (thousands) .....	41 975	(S)	6 604	8 545	11 092	5 180	4 830	-	-	-
Dollar value business done .....	2 483 528	(S)	327 908	511 299	623 205	326 136	326 410	-	-	-
Value of construction work <sup>1</sup> .....	2 400 570	(S)	321 694	498 116	604 072	627 313	(D)	-	-	-
Net value of construction work† .....	1 850 733	(S)	274 721	388 070	481 210	221 945	207 526	-	-	-
Value added†† .....	1 032 258	(S)	154 448	209 366	402 404	(D)	123 528	-	-	-
Cost of materials, components, supplies, and fuels .....	880 464	(S)	124 587	190 516	224 028	200 803	(D)	-	-	-
Cost of construction work subcontracted to others .....	549 837	(S)	46 973	110 046	122 862	197 842	(D)	-	-	-
Rental cost for machinery, equipment, and buildings .....	37 286	(S)	3 849	7 259	9 085	6 611	7 112	-	-	-
Capital expenditures, other than land .....	48 238	(S)	5 751	10 771	13 535	4 382	6 780	-	-	-
End-of-year gross book value of depreciable assets .....	412 835	(S)	52 707	93 773	138 474	31 434	43 370	-	-	-
<b>1982</b>										
All employees** .....	28 577	4 847	4 589	5 417	6 332	3 625	1 625	2 142	-	(D)
Value of construction work <sup>1</sup> .....	1 733 824	208 959	224 785	310 023	423 188	278 577	288 291	(D)	-	(D)
Value added†† .....	867 075	102 858	107 650	150 634	194 959	147 902	163 071	(D)	-	(D)
<b>1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)</b>										
All employees** .....	2	(S)	7	6	3	4	(W)	-	-	-
Net value of construction work† .....	1	(S)	7	5	3	2	(W)	-	-	-
Capital expenditures, other than land .....	5	(S)	21	14	9	3	(W)	-	-	-

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

**Table 8. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
<b>1987</b>											
Number of establishments -----	4 173	(S)	(S)	(S)	1 070	668	427	349	127	42	23
All employees** -----	30 434	(S)	(S)	(S)	3 705	4 093	4 307	6 275	4 677	2 496	2 528
Payroll, all employees -----	501 685	(S)	(S)	(S)	43 280	54 541	67 315	112 930	93 464	57 213	52 080
Construction worker hours (thousands) -----	41 975	(S)	(S)	(S)	4 571	5 092	5 750	8 737	6 975	4 319	3 925
Dollar value of business done -----	2 483 528	(S)	(S)	(S)	170 400	242 320	311 417	532 300	433 204	306 984	414 392
Value of construction work <sup>1</sup> -----	2 400 570	(S)	(S)	(S)	165 986	234 645	305 132	508 351	421 751	693 288	(D)
Net value of construction work† -----	1 850 733	(S)	(S)	(S)	150 920	200 138	252 743	409 594	312 997	216 823	242 103
Value added†† -----	1 032 258	(S)	(S)	(S)	87 327	110 892	137 082	220 588	171 692	127 836	136 115
Cost of materials, components, supplies, and fuels -----	880 464	(S)	(S)	(S)	66 093	93 940	118 738	203 437	152 161	<u>220 557</u>	(D)
Cost of construction work subcontracted to others -----	549 837	(S)	(S)	(S)	15 065	34 507	52 388	98 757	108 754	<u>234 361</u>	(D)
Rental cost for machinery, equipment, and buildings -----	37 286	(S)	(S)	(S)	2 122	3 188	4 453	6 377	7 978	5 156	6 894
Capital expenditures, other than land -----	48 238	(S)	(S)	(S)	3 282	5 147	7 621	8 867	9 856	5 286	7 145
End-of-year gross book value of depreciable assets -----	412 835	(S)	(S)	(S)	36 329	44 919	45 854	107 041	81 475	37 737	48 802
<b>1982</b>											
All employees** -----	28 577	746	854	1 933	3 840	3 553	3 739	5 339	3 299	1 379	3 893
Value of construction work <sup>1</sup> -----	1 733 824	7 187	17 604	52 504	148 711	163 314	192 789	344 651	270 037	161 347	375 679
Value added†† -----	867 075	3 566	9 474	27 925	75 184	81 434	93 532	166 610	132 253	54 366	222 729
<b>1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)</b>											
All employees** -----	2	(S)	(S)	(S)	8	9	7	5	3	2	(W)
Net value of construction work† -----	1	(S)	(S)	(S)	6	8	8	5	4	3	(W)
Capital expenditures, other than land -----	5	(S)	(S)	(S)	20	29	19	12	12	14	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.



**Table 9. Value of Construction Work for Establishments With Payroll by Type of Construction: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work <sup>1</sup>				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction <sup>2</sup>	Maintenance and repair	A	B	C	D
	A	B	C	D	A	B	C	D
<b>1987</b>								
Value of construction work <sup>1</sup> .....	2 400 570	1 497 452	457 701	283 884	1	2	4	4
<b>Building construction</b> .....	1 647 740	1 121 944	326 578	180 913	2	3	4	7
Single-family houses .....	427 564	298 277	78 788	50 498	5	7	13	9
Single-family houses, detached .....	402 723	282 065	74 537	46 119	6	7	13	9
Single-family houses, attached .....	24 840	16 212	4 250	4 378	22	31	36	24
Apartment buildings with two or more apartments .....	57 053	46 097	3 572	*7 383	13	12	27	53
Other residential buildings, including hotels and motels .....	62 232	48 884	8 377	4 970	5	5	22	17
Hotels and motels .....	49 563	43 772	*4 208	1 582	6	5	41	11
Other residential buildings, excluding hotels and motels .....	12 669	5 112	4 169	3 387	13	22	14	24
Office buildings .....	146 802	85 520	45 378	15 903	4	5	6	6
Other commercial buildings such as stores, restaurants, and automobile service stations .....	331 147	246 344	53 633	31 168	5	6	11	16
Industrial buildings and warehouses .....	276 488	160 669	71 764	44 055	4	6	4	5
Industrial buildings .....	238 362	134 783	65 478	38 100	4	6	5	5
Warehouses .....	38 126	25 885	6 286	5 954	9	12	15	20
Religious buildings .....	39 366	26 821	8 900	3 644	5	4	13	11
Educational buildings .....	97 718	73 077	17 478	7 161	10	10	17	33
Hospitals and institutional buildings .....	111 087	81 274	21 988	7 824	5	6	6	23
Farm buildings .....	38 667	32 558	4 403	1 704	13	14	11	21
Other nonresidential buildings .....	41 313	22 423	12 297	*6 603	23	31	36	57
Land development for buildings .....	18 303	(NA)	(NA)	(NA)	40	(NA)	(NA)	(NA)
<b>Nonbuilding construction</b> .....	609 602	375 507	131 123	102 971	3	4	6	5
Highways, streets, and related facilities .....	209 475	113 797	62 250	33 427	4	8	7	8
Bridges and elevated highways .....	59 860	(D)	13 961	(D)	1	(D)	(W)	(D)
Marine construction .....	23 892	(D)	(D)	(D)	(W)	(D)	(D)	(D)
Conservation and development construction .....	24 013	9 904	(S)	7 971	24	20	(S)	11
Power and communication transmission lines, towers, and related facilities .....	33 610	26 918	2 347	4 345	9	8	22	11
Sewers, water mains, and related facilities .....	102 544	79 333	14 579	8 631	12	12	31	17
Sewers, sewer lines, and related facilities .....	40 399	31 704	6 009	2 684	16	17	28	15
Water mains and related facilities .....	62 144	47 628	*8 569	5 946	14	14	46	23
Sewage treatment and water treatment plants .....	30 805	16 596	9 653	*4 555	12	5	8	65
Sewage treatment plants .....	17 872	8 672	5 235	*3 964	16	6	(W)	73
Water treatment plants .....	12 932	7 923	4 417	590	9	7	17	34
Earthmoving, nonbuilding .....	19 221	13 725	3 782	1 712	21	24	33	30
Other nonbuilding construction .....	106 182	62 186	14 199	29 803	16	16	23	26
<b>Construction work, n.s.k.</b> .....	143 227	(NA)	(NA)	(NA)	6	(NA)	(NA)	(NA)
<b>1982</b>								
Value of construction work <sup>1</sup> .....	1 733 824	1 444 628	(NA)	289 195	2	2	(NA)	3
<b>Building construction</b> .....	1 132 401	956 742	(NA)	175 659	2	2	(NA)	4
Single-family houses .....	266 201	209 833	(NA)	56 367	4	5	(NA)	6
Single-family houses, detached .....	223 235	170 317	(NA)	52 917	4	6	(NA)	6
Single-family houses, attached .....	42 966	39 516	(NA)	3 450	4	4	(NA)	18
Apartment buildings with two or more apartments .....	74 753	69 448	(NA)	5 304	6	6	(NA)	15
Other residential buildings, including hotels and motels .....	57 175	52 054	(NA)	5 121	4	3	(NA)	28
Office buildings .....	122 887	104 325	(NA)	18 562	4	4	(NA)	5
Other commercial buildings such as stores, restaurants, and automobile service stations .....	173 099	154 065	(NA)	19 034	4	4	(NA)	11
Industrial buildings and warehouses .....	229 139	182 416	(NA)	46 723	4	4	(NA)	7
Industrial buildings .....	189 795	147 329	(NA)	42 466	5	5	(NA)	7
Warehouses .....	39 344	35 087	(NA)	4 257	8	8	(NA)	11
Religious buildings .....	29 324	25 391	(NA)	3 933	15	18	(NA)	14
Educational buildings .....	54 026	45 454	(NA)	8 572	8	7	(NA)	20
Hospitals and institutional buildings .....	100 741	93 613	(NA)	7 128	2	2	(NA)	8
Farm buildings .....	6 688	4 504	(NA)	*2 183	15	10	(NA)	41
Amusement, social, and recreational buildings .....	10 898	9 204	(NA)	1 694	13	15	(NA)	19
Other nonresidential buildings .....	7 470	6 435	(NA)	1 038	23	22	(NA)	31
<b>Nonbuilding construction</b> .....	459 012	372 326	(NA)	86 686	3	3	(NA)	5
Highways, streets, and related facilities .....	139 311	113 189	(NA)	26 121	5	4	(NA)	11
Bridges, tunnels, and elevated highways .....	34 851	31 694	(NA)	3 157	9	9	(NA)	4
Marine construction .....	18 656	15 633	(NA)	3 022	3	(W)	(NA)	21
Conservation and development construction .....	12 206	6 989	(NA)	5 216	18	32	(NA)	5
Power and communication transmission lines, towers, and related facilities .....	43 732	35 005	(NA)	8 727	7	8	(NA)	11
Sewers, water mains, and related facilities .....	52 720	43 078	(NA)	9 642	6	6	(NA)	10
Sewers, sewer lines, and related facilities .....	23 672	19 426	(NA)	4 245	8	9	(NA)	15
Water mains and related facilities .....	29 048	23 652	(NA)	5 396	8	7	(NA)	16
Pipeline, other than sewer or water lines .....	19 864	16 507	(NA)	3 356	11	12	(NA)	9
Heavy industrial facilities .....	72 575	63 252	(NA)	9 322	4	3	(NA)	11
Sewage treatment and water treatment plants .....	19 088	17 196	(NA)	1 891	17	16	(NA)	33
Sewage treatment plants .....	10 492	9 315	(NA)	1 176	23	21	(NA)	38
Water treatment plants .....	8 595	7 880	(NA)	*714	28	25	(NA)	63
Other nonbuilding construction .....	74 465	55 082	(NA)	19 389	28	31	(NA)	30
<b>Construction work, n.s.k.</b> .....	142 409	115 560	(NA)	26 849	5	5	(NA)	5

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

<sup>2</sup>In 1982, data for additions, alterations, or reconstruction were not collected separately. These data are included with "New construction".



**Table 10. Quarterly Construction Worker Hours and Employment With Payroll by Industry:**

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Number of establishments	Average number of construction workers	Construction worker hours (thousands)	January to March		April to June	
					Construction workers <sup>1</sup>	Hours worked (thousands)	Construction workers <sup>1</sup>	Hours worked (thousands)
		A	B	C	D	E	F	G
	<b>Construction Industries and land subdividers and developers -----</b>	<b>4 173</b>	<b>24 421</b>	<b>41 975</b>	<b>22 935</b>	<b>9 375</b>	<b>25 032</b>	<b>10 692</b>
<b>15, 16, 17</b>	<b>Construction industries:</b>							
<b>15</b>	<b>Building construction—General contractors and operative builders:</b>							
152	General contractors, residential buildings:							
1521	Single-family houses -----	550	1 400	2 124	1 298	468	1 440	555
1522	Other residential buildings -----	43	310	463	372	136	294	93
1531	Operative builders -----	136	361	(D)	(D)	(D)	387	(D)
154	General contractors, nonresidential buildings:							
1541	Industrial buildings and warehouses -----	39	823	1 711	780	391	816	418
1542	Nonresidential buildings, n.e.c. -----	318	3 635	6 382	3 412	1 459	3 612	1 516
<b>16</b>	<b>Heavy construction other than building construction—contractors:</b>							
1611	Highway and street construction -----	100	1 890	3 631	1 525	625	1 989	971
162	Heavy construction, except highway:							
1622	Bridge, tunnel, and elevated highway construction -----	13	306	318	325	76	310	73
1623	Water, sewer, and utility lines -----	145	1 482	3 063	1 363	718	1 543	814
1629	Heavy construction, n.e.c. -----	196	1 459	2 474	1 216	439	1 527	686
<b>17</b>	<b>Special trade contractors:</b>							
1711	Plumbing, heating, and air-conditioning ----	634	2 931	5 414	2 818	1 274	2 956	1 341
1721	Painting and paper hanging -----	133	592	900	542	195	576	211
1731	Electrical work -----	415	2 106	3 730	2 060	870	2 114	939
174	Masonry, stonework, tile setting, and plastering:							
1741	Masonry, stone setting, and other stonework -----	187	806	1 137	756	272	868	299
1742	Plastering, drywall, and insulation work --	104	658	1 028	617	236	629	259
1743	Terrazzo, tile, marble, and mosaic work --	*23	67	138	66	29	56	*31
175	Carpentry and floor work:							
1751	Carpentry -----	213	581	974	571	223	602	252
1752	Floor laying and other floor work -----	50	121	187	159	55	127	50
1761	Roofing, siding, and sheet metal work -----	204	1 310	2 335	1 414	592	1 423	605
1771	Concrete work -----	174	1 122	1 466	996	308	1 140	355
1781	Water well drilling -----	55	169	257	163	58	184	78
179	Miscellaneous special trade contractors:							
1791	Structural steel erection -----	43	446	669	435	177	408	157
1793	Glass and glazing work -----	30	155	252	151	63	165	66
1794	Excavation work -----	97	487	785	399	142	490	207
1795	Wrecking and demolition work -----	10	13	(D)	(D)	(D)	*17	(D)
1796	Installing building equipment, n.e.c. -----	38	461	781	420	165	562	216
1799	Special trade contractors, n.e.c. -----	160	648	1 088	640	243	724	316
<b>6552</b>	<b>Land subdividers and developers, n.e.c. --</b>	<b>57</b>	<b>68</b>	<b>122</b>	<b>56</b>	<b>27</b>	<b>65</b>	<b>31</b>

<sup>1</sup>Construction workers during pay periods including 12th of March, May, August, and November.

July to September		October to December		Relative standard error of estimate (percent) for column—										1987 SIC code
Construction workers¹	Hours worked (thousands)	Construction workers¹	Hours worked (thousands)											
H	I	J	K	B	C	D	E	F	G	H	I	J	K	
26 463	11 613	23 254	10 293	2	2	2	2	2	2	2	2	2	2	15, 16, 17
														15
1 531 274	567 108	1 332 299	533 125	8 14	13 17	9 15	15 14	9 16	13 15	8 21	13 24	8 18	13 29	152 1521 1522
357	(D)	(D)	124	26	(D)	(D)	(D)	23	(D)	26	(D)	(D)	29	1531
														154
897 4 082	506 1 736	801 3 434	394 1 671	8 5	12 6	8 5	11 6	8 6	11 6	7 6	11 6	12 5	15 7	1541 1542
														16
2 239	1 156	1 808	877	5	5	4	6	4	6	6	6	4	5	1611
														162 1622
328 1 567 1 652	91 837 724	264 1 453 1 440	76 692 624	(W) 7 10	20 10 7	(W) 7 12	9 11 8	(W) 7 9	12 10 9	(W) 9 11	33 12 7	(W) 8 8	32 10 6	1623 1629
														17
3 106	1 442	2 842	1 356	5	6	5	7	5	7	5	7	4	6	1711
663	255	587	238	13	15	14	20	11	17	16	15	13	14	1721
2 227	995	2 024	925	5	6	5	7	5	7	5	7	5	7	1731
														174
														1741
900 673 71	305 272 40	705 715 74	260 260 37	13 11 31	21 12 35	14 11 40	22 13 40	16 9 37	24 13 43	15 13 29	22 12 33	13 13 22	19 13 27	175 1742 1743
643 127	279 48	511 72	218 33	25 21	27 24	27 17	28 19	25 37	27 34	26 25	27 27	22 34	26 33	1751 1752
1 256	593	1 149	544	8	11	9	12	9	12	9	12	9	12	1761
1 281	422	1 070	379	17	15	19	17	20	16	17	16	18	19	1771
181	69	150	50	17	6	19	10	21	10	15	5	19	2	1781
														179
456 155 533 19 459 699	167 64 234 (D) 207 313	485 150 525 (D) 404 530	166 58 200 4 192 214	14 16 13 27 7 14	17 19 16 (D) 11 18	15 17 13 (D) 11 17	21 22 17 (D) 8 20	17 19 12 44 6 15	23 20 16 (D) 12 18	13 15 12 39 7 14	15 18 16 (D) 16 20	13 14 17 (D) 6 14	14 16 16 (W) 12 18	1791 1793 1794 1795 1796 1799
79	32	73	30	21	36	24	39	23	36	23	35	23	36	6552



**Table 11. Selected Industry Ratios for Establishments With Payroll in This State: 1987**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Average number of employees** per estab- lishment	Payroll per employee (\$1,000)	Construction worker hours per construction worker	Value of construction work per construction worker (\$1,000)	Average per dollar of value of construction work			
						Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Rental cost for machinery, equipment, and buildings
	<b>Construction industries and land subdividers and developers</b> -----	<b>7.3</b>	<b>16.5</b>	<b>1 718.8</b>	<b>98.3</b>	<b>.209</b>	<b>.367</b>	<b>.229</b>	<b>.016</b>
15, 16, 17	<b>Construction industries:</b>								
15	<b>Building construction—General contractors and operative builders:</b>								
152	General contractors, residential buildings:								
1521	Single-family houses-----	3.3	13.5	1 517.1	117.7	.149	.408	.289	.007
1522	Other residential buildings-----	9.7	16.5	1 493.5	177.2	.126	.215	.368	.006
1531	Operative builders-----	(D)	(D)	(D)	275.9	(D)	.352	.406	.007
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses-----	26.1	20.2	2 079.0	103.7	.241	.319	.346	.014
1542	Nonresidential buildings, n.e.c.-----	14.6	16.9	1 755.7	157.1	.137	.276	.465	.011
16	<b>Heavy construction other than building construction—contractors:</b>								
1611	Highway and street construction-----	22.3	19.3	1 921.2	118.9	.191	.434	.158	.027
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction-----	27.4	17.5	1 039.2	150.7	.135	(D)	.286	.009
1623	Water, sewer, and utility lines-----	12.3	16.2	2 066.8	84.8	.228	.356	.117	.028
1629	Heavy construction, n.e.c.-----	8.9	18.3	1 695.7	87.2	.251	.392	.090	.032
17	<b>Special trade contractors:</b>								
1711	Plumbing, heating, and air-conditioning-----	5.9	17.8	1 847.2	89.2	.257	.484	.087	.013
1721	Painting and paper hanging-----	5.4	14.2	1 520.3	59.9	.285	.216	*.081	.012
1731	Electrical work-----	6.6	17.4	1 771.1	75.0	.301	.445	.043	.011
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework-----	4.7	9.4	1 410.7	34.9	.291	.262	.022	.007
1742	Plastering, drywall, and insulation work-----	7.5	16.5	1 562.3	60.7	.324	.405	.086	.014
1743	Terrazzo, tile, marble, and mosaic work-----	*3.9	20.3	2 059.7	123.7	.220	.443	*.014	.005
175	Carpentry and floor work:								
1751	Carpentry-----	3.0	10.2	1 676.4	41.8	.269	.341	.118	.009
1752	Floor laying and other floor work-----	3.0	12.3	1 545.5	51.6	.300	.385	(S)	*.006
1761	Roofing, siding, and sheet metal work-----	7.9	15.5	1 782.4	67.9	.280	(D)	.051	.011
1771	Concrete work-----	7.2	11.8	1 306.6	54.7	.241	.438	*.085	.024
1781	Water well drilling-----	4.3	12.4	1 520.7	94.8	.183	.598	.021	(S)
179	Miscellaneous special trade contractors:								
1791	Structural steel erection-----	13.2	20.3	1 500.0	71.5	.362	.376	.052	.014
1793	Glass and glazing work-----	6.9	20.4	1 625.8	88.7	.308	.614	.008	.019
1794	Excavation work-----	6.1	15.2	1 611.9	77.9	.238	.207	.173	.051
1795	Wrecking and demolition work-----	(D)	(D)	(D)	36.0	(D)	(D)	*.130	(D)
1796	Installing building equipment, n.e.c.-----	13.8	18.5	1 694.1	64.2	.327	(D)	.060	.030
1799	Special trade contractors, n.e.c.-----	5.3	14.8	1 679.0	64.4	.303	.450	.038	.021
6552	<b>Land subdividers and developers, n.e.c.</b> -----	<b>2.6</b>	<b>17.4</b>	<b>1 794.1</b>	<b>254.9</b>	<b>.148</b>	<b>.119</b>	<b>.584</b>	<b>.007</b>

**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>MEMPHIS, TN-AR-MS MSA</b>											
	Construction industries and land subdividers and developers .....	1 819	21 473	415 557	1 927 680	1 425 119	837 251	627 703	502 561	28 575	1	2
15,16, 17	Construction industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses .....	202	1 100	16 932	99 172	77 108	48 042	29 545	22 064	1 207	11	16
1522	Other residential buildings .....	27	658	15 025	141 163	65 609	32 348	(D)	75 554	1 074	5	4
1531	Operative builders .....	145	697	18 909	184 484	118 026	42 889	75 894	66 458	656	15	16
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses .....	8	121	2 839	17 882	11 155	7 464	(D)	6 727	(D)	7	5
1542	Nonresidential buildings, n.e.c. ....	117	2 359	49 976	379 350	173 998	95 815	82 526	205 353	1 971	5	5
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction .....	35	1 223	24 601	115 189	94 677	59 688	39 335	20 512	4 448	8	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction .....	*7	183	2 834	(D)	(D)	(D)	3 902	(D)	*131	34	(D)
1623	Water, sewer, and utility lines .....	35	739	13 037	63 883	55 459	31 077	(D)	8 424	2 057	7	8
1629	Heavy construction, n.e.c. ....	39	544	12 255	52 006	44 454	28 784	17 193	7 552	3 024	11	9
17	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning .....	252	2 760	55 970	214 090	194 476	109 619	86 362	19 613	4 369	4	5
1721	Painting and paper hanging .....	125	1 132	17 994	47 452	43 452	30 355	(D)	4 000	1 072	9	12
1731	Electrical work .....	151	2 389	54 287	126 939	124 107	80 462	53 220	2 832	1 965	4	4
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework .....	79	783	11 627	28 577	27 728	19 077	(D)	849	326	11	7
1742	Plastering, drywall, and insulation work .....	60	1 385	24 310	98 126	84 160	48 398	37 087	13 966	839	5	8
1743	Terrazzo, tile, marble, and mosaic work .....	34	481	7 555	23 178	22 845	12 846	10 592	333	276	15	11
175	Carpentry and floor work:											
1751	Carpentry .....	86	410	6 302	20 882	18 185	13 784	7 991	2 697	*258	19	19
1752	Floor laying and other floorwork .....	33	133	2 187	6 704	(D)	3 732	3 275	(D)	(D)	19	(D)
1761	Roofing, siding, and sheet metal work .....	69	965	17 395	51 796	48 379	25 701	23 138	3 417	540	6	5
1771	Concrete work .....	74	538	7 710	32 803	28 319	16 743	(D)	4 484	850	20	11
1781	Water well drilling .....	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1793	Glass and glazing work .....	16	193	4 242	12 968	12 954	8 092	6 798	14	110	6	2
1794	Excavation work .....	16	315	5 811	26 875	(D)	16 596	4 544	(D)	1 157	1	(D)
1795	Wrecking and demolition work .....	*11	(D)	(D)	(S)	(S)	(S)	*747	(S)	(S)	(D)	(S)
1796	Installing building equipment, n.e.c. ....	25	823	20 672	83 910	67 907	44 993	(D)	16 003	569	2	2
1799	Special trade contractors, n.e.c. ....	117	1 012	12 931	47 708	43 482	28 394	17 326	4 226	*866	15	12
6552	Land subdividers and developers, n.e.c. ....	30	96	2 357	*12 756	*10 968	*11 056	739	*1 789	(D)	37	44





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## Louisiana

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# SUMMARY OF FINDINGS

This report provides results from the 1987 Census of Construction Industries for Louisiana. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property into lots, as defined in the 1987 Standard Industrial Classification (SIC) Manual. The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters. In addition, this census also includes one industry classified under "Real Estate" in the Manual, SIC 6552, Land Subdividers and Developers, Except Cemeteries.

During 1987, there were 26,981 establishments in this State operating in the construction industries or as land subdividers and developers. These establishments accounted for \$6.5 billion in total value of business done.

Most of the 26,981 construction establishments were small. Of the total, 20,642 were nonemployers, and over half of the employer establishments had less than 5 employees. The 2,797 construction establishments with 5 employees or more, while representing only 10 percent of all establishments, accounted for more than 79 percent of the total value of business done.

## ESTABLISHMENTS WITH PAYROLL

During 1987, the establishments with paid employees accounted for \$5.7 billion on total dollar value of business done. Of this amount, \$5.6 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$1.1 billion, leaving net value of construction work of \$4.5 billion. In addition, these establishments paid out \$2.0 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1987 was \$2.8 billion. (See Introduction and appendixes for explanation of terms.)

There were 6,339 establishments with total employment averaging 76,720 during the year. Total payroll for 1987 was \$1.5 billion. Total hours worked by construction workers during the year were 108 million hours.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

In 1987, the value of construction work was collected to better measure actual construction activity done during the year. Construction receipts, as reported in earlier censuses, may have included the value of work done before or after the calendar year and may have also excluded work done by builders for their own use. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

## ESTABLISHMENTS WITHOUT PAYROLL

During 1987, there were 20,642 establishments with no payroll classified as construction or land subdividers and developers. According to administrative records of the Federal Government, their value of business done during 1987 was \$777 million. Most of these establishments, about 77 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in tables 1 and 2 of this report.

Figure 1. **Selected Costs Per Dollar Value of Business Done**  
(Percent)

1987  
1982

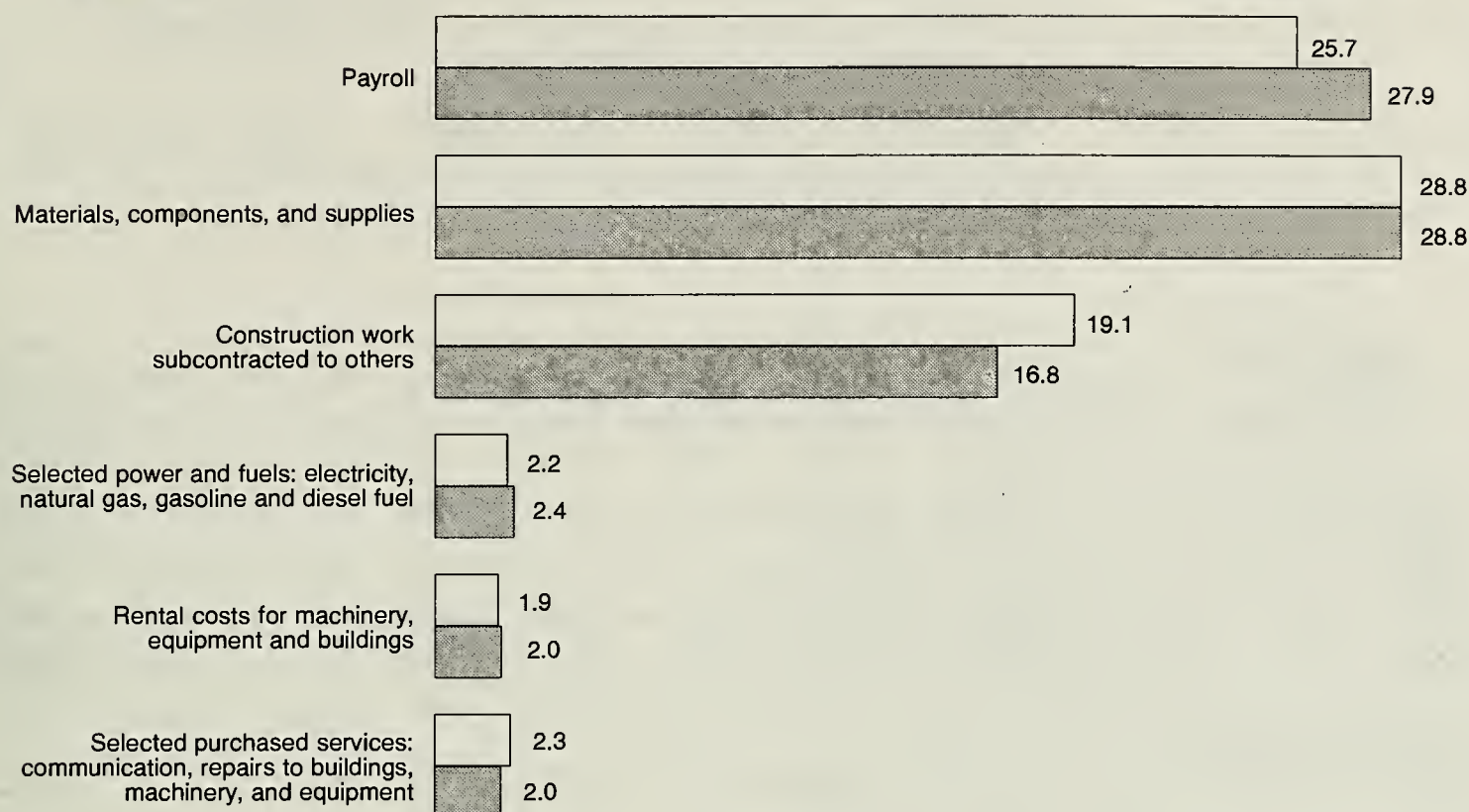
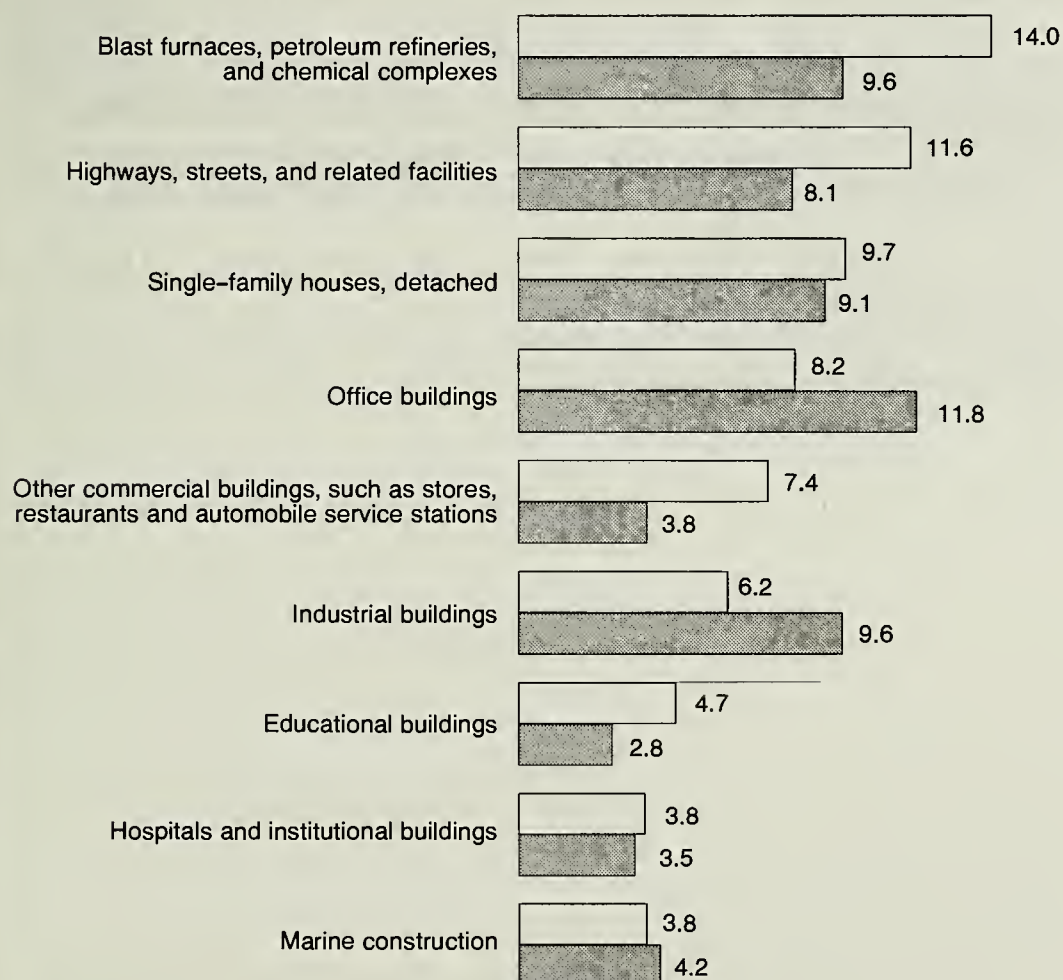


Figure 2. **Value of Construction Work by Type of Construction**  
(Percent)

1987  
1982





**Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprie- tors and working partners	All em- ployees**	Dollar value of business done	Number	Proprie- tors and working partners	Dollar value of business done	Number	Proprie- tors and working partners	All em- ployees**	Dollar value of business done¹		
		A	B	C	D	E	F	G	H	I	J	K	J	K
15, 16, 17	1987													
	Construction Industries and land subdividers and developers -----	26 981	20 851	76 720	6 523 189	20 642	19 652	777 493	6 339	1 199	76 720	5 745 696	1	1
	Construction Industries -----	26 398	20 420	76 292	6 387 903	20 169	19 240	688 586	6 229	1 180	76 292	5 699 317	1	1
	Building construction—General contractors and operative builders ----	5 352	3 412	12 422	1 799 940	3 736	3 174	281 201	1 616	238	12 422	1 518 739	3	3
	Heavy construction other than building construction— contractors -----	1 300	652	28 816	2 160 126	593	563	42 572	707	89	28 816	2 117 554	1	1
	Special trade contractors -----	19 746	16 356	35 054	2 427 837	15 840	15 503	364 813	3 906	853	35 054	2 063 024	2	2
	Plumbing, heating, and air-conditioning --	2 496	1 717	6 487	517 335	1 577	1 513	51 452	919	204	6 487	465 883	4	2
	Electrical work -----	2 118	1 458	7 874	533 336	1 352	1 280	36 255	766	178	7 874	497 081	2	2
	Land subdividers and developers, n.e.c.² -----	571	423	*413	135 274	473	412	88 908	98	11	*413	*46 366	41	51
	1982													
15, 16, 17	Construction Industries and land subdividers and developers -----	24 126	17 497	119 557	8 707 885	15 905	15 270	668 627	8 221	2 227	119 557	8 039 258	1	1
	Construction Industries -----	23 603	17 172	119 011	8 591 961	15 484	14 959	606 720	8 119	2 213	119 011	7 985 241	1	1
	Building construction—General contractors and operative builders ----	4 013	2 037	24 084	2 309 018	1 882	1 535	184 359	2 131	502	24 084	2 124 659	2	1
	Heavy construction other than building construction— contractors -----	1 025	366	36 664	2 682 522	300	273	33 394	725	93	36 664	2 649 128	1	2
	Special trade contractors -----	18 565	14 769	58 263	3 600 421	13 302	13 151	388 967	5 263	1 616	58 263	3 211 454	1	(W)
	Plumbing, heating, and air-conditioning --	2 183	1 398	8 945	617 735	1 112	1 077	48 232	1 071	321	8 945	569 503	3	2
	Electrical work -----	1 725	992	12 384	762 264	839	807	31 266	886	185	12 384	730 998	3	1
	Land subdividers and developers, n.e.c.² -----	518	323	541	115 919	421	311	61 907	97	*12	541	54 012	13	12

Note: Number of establishments in this and subsequent tables represent those in business at any time during the year.

<sup>1</sup>For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.

<sup>2</sup>For establishments without payroll, may also include data for an unknown number of cemetery subdividers and developers.

**Table 2. Summary Statistics by Size Class of Dollar Value of Business Done for Establishments With and Without Payroll : 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Receipts size	All establishments				Establishments without payroll <sup>1</sup>			Establishments with payroll				Relative standard error of estimate (percent) for column—	
	Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done	Number	Proprietors and working partners	All employees**	Dollar value of business done <sup>2</sup>		
	A	B	C	D	E	F	G	H	I	J	K	J	K
<b>1987</b>													
The State .....	26 981	20 851	76 720	6 523 189	20 642	19 652	777 493	6 339	1 199	76 720	5 745 696	1	1
\$10,000,000 or more .....	95	8	24 607	2 288 116	3	4	53 366	92	4	24 607	2 234 750	(W)	(W)
\$5,000,000 to \$9,999,999 .....	109	9	7 382	740 368	-	-	-	109	9	7 382	740 368	1	4
\$2,500,000 to \$4,999,999 .....	181	12	7 989	622 338	8	2	27 550	173	10	7 989	594 788	1	3
\$1,000,000 to \$2,499,999 .....	617	61	11 612	957 155	35	26	55 095	582	*35	11 612	902 060	3	5
\$500,000 to \$999,999 .....	920	167	8 698	638 771	116	58	79 498	804	109	8 698	559 273	5	5
\$250,000 to \$499,999 .....	1 280	325	7 209	445 451	273	178	93 824	1 007	147	7 209	351 627	7	6
\$100,000 to \$249,999 .....	(S)	(S)	(S)	(S)	955	784	142 644	(S)	(S)	(S)	(S)	(S)	(S)
\$50,000 to \$99,999 .....	(S)	(S)	(S)	(S)	1 683	1 506	117 064	(S)	(S)	(S)	(S)	(S)	(S)
\$25,000 to \$49,999 .....	(S)	(S)	(S)	(S)	2 550	2 423	90 083	(S)	(S)	(S)	(S)	(S)	(S)
Less than \$25,000 .....	(S)	(S)	(S)	(S)	15 019	14 671	118 369	(S)	(S)	(S)	(S)	(S)	(S)
\$10,000 to \$24,999 .....	(NA)	(NA)	(NA)	(NA)	4 759	4 605	75 996	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999 .....	(NA)	(NA)	(NA)	(NA)	3 803	3 715	27 723	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,000 to \$4,999 .....	(NA)	(NA)	(NA)	(NA)	2 660	2 608	9 766	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,000 .....	(NA)	(NA)	(NA)	(NA)	3 797	3 743	4 884	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
<b>1982</b>													
The State .....	24 126	17 497	119 557	8 707 885	15 905	15 270	668 627	8 221	2 227	119 557	8 039 258	1	1
\$10,000,000 or more .....	121	3	45 380	(D)	1	-	(D)	120	3	45 380	3 662 758	(W)	(W)
\$5,000,000 to \$9,999,999 .....	134	9	12 154	(D)	1	2	(D)	133	7	12 154	939 090	(W)	(W)
\$2,500,000 to \$4,999,999 .....	245	13	11 431	5 480 854	10	10	51 044	235	3	11 431	827 962	(W)	1
\$1,000,000 to \$2,499,999 .....	704	55	15 593	1 082 098	34	21	49 450	670	34	15 593	1 032 648	2	3
\$500,000 to \$999,999 .....	1 071	162	12 029	763 394	106	70	73 676	965	92	12 029	689 718	5	4
\$250,000 to \$499,999 .....	1 508	489	9 339	536 207	272	215	92 687	1 236	274	9 339	443 520	5	5
\$100,000 to \$249,999 .....	2 793	1 374	8 033	442 170	830	716	125 022	1 963	658	8 033	317 148	6	4
\$50,000 to \$99,999 .....	2 656	1 877	3 022	187 231	1 474	1 396	101 220	1 182	481	3 022	86 011	7	5
\$25,000 to \$49,999 .....	3 207	2 640	1 513	112 531	2 386	2 275	82 820	821	365	1 513	29 711	9	7
Less than \$25,000 .....	(S)	(S)	(S)	(S)	10 791	10 565	92 708	(S)	(S)	(S)	(S)	(S)	(S)
\$10,000 to \$24,999 .....	(NA)	(NA)	(NA)	(NA)	4 123	4 036	64 666	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999 .....	(NA)	(NA)	(NA)	(NA)	2 888	2 834	19 787	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,500 to \$4,999 .....	(NA)	(NA)	(NA)	(NA)	2 344	2 302	6 819	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,500 .....	(NA)	(NA)	(NA)	(NA)	1 436	1 393	1 436	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Underscored data fields include data from adjoining lines which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>For establishments without payroll, may include data for an unknown number of cemetery subdividers and developers.

<sup>2</sup>For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.



**Table 3. General Statistics for Establishments With Payroll by Industry: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	1987							
		Number of establish- ments	Employees**		Payroll		Construction worker hours (thousands)	Value of construction work	Net value of construction work†
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
	<b>Construction Industries and land subdividers and developers -----</b>	<b>6 339</b>	<b>76 720</b>	<b>62 823</b>	<b>1 476 504</b>	<b>1 126 622</b>	<b>107 665</b>	<b>5 598 712</b>	<b>4 500 503</b>
<b>15, 16, 17</b>	<b>Construction Industries:</b>								
<b>15</b>	<b>Building construction—General contractors and operative builders:</b>								
152	General contractors, residential buildings:								
1521	Single-family houses-----	812	2 768	1 870	36 270	22 386	2 569	216 736	160 305
1522	Other residential buildings-----	74	658	493	11 241	7 517	1 014	77 240	44 035
1531	Operative builders-----	146	615	254	10 581	2 158	354	115 850	62 434
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses-----	112	1 898	1 537	35 583	24 826	2 690	155 487	115 124
1542	Nonresidential buildings, n.e.c.-----	472	6 483	4 875	118 975	77 004	8 530	910 398	412 769
<b>16</b>	<b>Heavy construction other than building construction—contractors:</b>								
1611	Highway and street construction-----	164	7 051	5 973	152 156	111 654	10 506	737 252	616 146
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction-----	16	702	614	13 272	11 085	973	64 330	49 714
1623	Water, sewer, and utility lines-----	194	4 035	3 365	77 752	59 296	6 036	273 229	247 628
1629	Heavy construction, n.e.c.-----	333	17 028	15 217	369 726	317 097	27 949	1 009 234	901 269
<b>17</b>	<b>Special trade contractors:</b>								
1711	Plumbing, heating, and air-conditioning-----	919	6 487	4 825	119 061	83 100	8 597	462 665	402 748
1721	Painting and paper hanging-----	324	3 050	2 666	47 181	38 613	4 153	128 311	117 529
1731	Electrical work-----	766	7 874	6 358	169 453	127 967	11 435	493 263	479 777
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework-----	202	1 995	1 732	29 568	23 882	1 988	93 980	89 050
1742	Plastering, drywall, and insulation work-----	176	2 690	2 305	56 257	47 274	3 972	136 240	127 071
1743	Terrazzo, tile, marble, and mosaic work-----	37	272	204	4 794	3 647	407	13 001	12 313
175	Carpentry and floor work:								
1751	Carpentry-----	244	877	684	12 886	9 088	1 016	58 373	52 864
1752	Floor laying and other floor work-----	104	426	318	5 601	3 933	455	25 769	23 907
1761	Roofing, siding, and sheet metal work-----	306	3 043	2 379	47 759	32 538	3 803	156 060	148 163
1771	Concrete work-----	94	930	752	11 787	8 644	1 033	50 788	45 869
1781	Water well drilling-----	32	220	172	4 014	2 590	289	12 837	12 691
179	Miscellaneous special trade contractors:								
1791	Structural steel erection-----	95	1 134	955	20 135	16 236	1 510	60 587	55 746
1793	Glass and glazing work-----	61	565	437	11 664	9 214	741	38 815	37 359
1794	Excavation work-----	104	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1795	Wrecking and demolition work-----	*15	134	107	1 894	1 480	154	8 205	*7 589
1796	Installing building equipment, n.e.c.-----	80	1 068	863	26 025	20 817	1 488	68 544	67 034
1799	Special trade contractors, n.e.c.-----	347	3 746	3 248	67 978	56 053	4 860	177 084	169 830
<b>6552</b>	<b>Land subdividers and developers, n.e.c.-----</b>	<b>98</b>	<b>*413</b>	<b>*189</b>	<b>*6 349</b>	<b>*2 546</b>	<b>*461</b>	<b>24 392</b>	<b>*14 380</b>

†In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

1987—Con.						1982			Relative standard error of estimate (percent) for column—			1987 SIC code
Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted to others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Total construction receipts¹	Value added††				
I	J	K	L	M	N	O	P	Q	B	H	M	
2 826 778	1 780 289	1 098 208	108 462	81 797	1 221 879	119 557	7 809 574	4 133 448	1	1	3	15, 16, 17
												15
90 930	75 546	56 431	1 714	1 269	26 812	(S)	(S)	(S)	9	8	25	152
22 880	(D)	33 205	*640	250	3 719	1 382	181 704	58 359	18	15	34	1521
												1522
22 535	40 997	53 415	380	838	11 673	1 692	156 685	51 806	11	17	31	1531
73 682	42 792	40 362	3 771	901	13 684	5 518	352 575	174 964	8	8	10	154
224 511	202 975	497 629	8 848	4 750	65 243	8 489	1 042 669	229 474	4	3	10	1541
												1542
												16
313 860	313 788	121 106	13 608	23 965	244 438	9 935	637 067	269 947	3	2	4	1611
25 513	(D)	14 616	998	(D)	13 190	348	34 885	12 945	10	8	(D)	162
166 885	84 100	25 601	11 028	7 136	90 817	7 626	516 145	334 932	4	4	21	1622
663 379	256 046	107 964	33 180	15 210	470 271	18 755	1 409 072	917 177	1	1	5	1623
												1629
												17
219 696	186 270	59 916	7 387	7 186	62 612	8 945	560 840	273 642	4	2	16	1711
90 509	27 215	10 781	2 793	2 257	20 583	3 285	107 973	77 476	6	8	28	1721
307 090	176 504	13 486	6 457	3 802	51 624	12 384	726 187	423 237	2	2	11	1731
56 548	(D)	*4 930	1 504	286	8 828	2 309	92 650	57 628	10	18	25	174
94 188	(D)	9 169	1 767	1 349	16 345	5 524	289 436	201 959	5	5	13	1741
7 609	(D)	*688	119	292	1 439	782	31 246	16 788	12	10	33	1742
												1743
32 420	21 039	5 509	488	381	*4 787	3 928	154 325	109 171	11	14	34	175
15 810	9 369	1 861	314	179	1 973	454	22 121	13 847	14	15	29	1751
												1752
95 148	56 317	7 896	2 123	4 210	22 288	3 420	146 900	91 464	8	5	31	1761
27 000	20 478	4 919	1 781	788	6 069	1 971	91 767	54 436	17	15	22	1771
7 659	(D)	146	*360	188	6 414	330	18 031	7 647	13	12	10	1781
38 833	18 878	4 841	1 312	375	14 913	1 783	85 306	55 544	6	10	23	179
20 337	19 247	(S)	366	*168	2 648	693	52 234	27 270	5	5	57	1791
(S)	(S)	(S)	(S)	(S)	(S)	4 108	258 773	177 099	(S)	(S)	(S)	1793
6 959	1 274	616	283	639	(D)	112	4 203	3 712	24	41	(W)	1794
52 749	17 900	1 509	757	618	9 331	1 364	95 706	66 082	6	4	23	1795
119 860	57 527	7 254	5 341	2 621	23 146	6 871	367 660	266 998	5	5	24	1796
												1799
*11 357	*3 874	*10 012	*154	*595	*12 084	541	26 410	15 845	41	43	52	6552



**Table 4. Detailed Statistics for Establishments With Payroll: 1987 and Earlier Census Years**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	1977	1972	Relative standard error of estimate (percent)			
					1987	1982	1977	1972
Number of establishments in business during year .....	6 339	8 221	7 509	6 809	1	2	3	3
Proprietors and working partners.....	1 199	2 227	3 853	3 905	7	4	5	5
All employees** .....	76 720	119 557	107 326	84 518	1	1	1	2
Construction workers:								
March.....	61 939	100 755	89 042	67 904	1	1	1	2
May.....	63 907	101 265	95 246	74 056	1	1	1	2
August.....	63 829	100 165	96 756	77 697	1	1	1	2
November.....	61 616	97 772	94 440	72 701	1	1	1	2
Average.....	62 823	100 690	94 265	73 789	1	1	1	2
Other employees:								
March.....	14 306	18 614	12 505	10 348	2	1	1	2
May.....	13 868	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
August.....	13 852	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
November.....	13 567	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Average.....	13 898	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Construction worker hours (thousands):								
January to March.....	25 597	43 922	(NA)	(NA)	1	1	(NA)	(NA)
April to June.....	27 078	44 673	(NA)	(NA)	1	1	(NA)	(NA)
July to September.....	27 818	44 507	(NA)	(NA)	1	1	(NA)	(NA)
October to December.....	27 169	41 751	(NA)	(NA)	1	1	(NA)	(NA)
Total hours worked.....	107 665	174 854	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees .....	1 476 504	2 241 452	1 316 983	675 906	1	(W)	1	1
Payroll, construction workers .....	1 126 622	1 768 059	1 098 375	560 537	1	(W)	1	1
Payroll, other employees .....	349 881	473 393	218 608	115 369	1	1	1	2
First quarter payroll, all employees .....	349 375	542 256	296 056	(NA)	1	1	1	(NA)
Employer costs for fringe benefits, all employees .....	297 041	410 001	230 460	(NA)	1	1	4	(NA)
Legally required expenditures.....	232 133	307 663	150 020	(NA)	1	1	3	(NA)
Voluntary expenditures.....	64 908	102 338	80 440	(NA)	1	1	5	(NA)
Dollar value of business done .....	5 745 696	8 039 258	4 579 183	2 605 314	1	1	1	2
Value of construction work <sup>1</sup> .....	5 598 712	7 809 574	4 431 332	2 512 381	1	1	1	2
Value of construction work subcontracted in from others .....	1 087 755	1 448 912	863 245	409 128	2	1	1	3
Land receipts <sup>2</sup> .....	40 419	45 952	(NA)	(NA)	32	7	(NA)	(NA)
Other business receipts.....	106 564	183 731	147 852	92 933	5	2	3	7
Net value of construction† .....	4 500 503	6 456 118	3 672 235	1 994 114	1	(W)	1	2
Value added†† .....	2 826 778	4 133 448	2 292 002	1 204 292	1	1	1	2
Selected costs .....	2 878 498	3 859 858	2 239 410	1 370 854	1	1	1	2
Materials, components, and supplies <sup>3</sup> .....	1 654 639	2 314 062	1 395 099	852 587	1	1	1	3
Construction work subcontracted to others.....	1 098 208	1 353 456	759 097	518 267	2	1	2	3
Selected power, fuels, and lubricants.....	125 650	192 339	85 215	(NA)	1	1	1	(NA)
Electricity.....	17 568	37 314	8 360	(NA)	2	1	3	(NA)
Natural gas.....	4 305	6 248	4 064	(NA)	4	4	3	(NA)
Gasoline and diesel fuel .....	95 646	140 461	61 320	(NA)	1	1	1	(NA)
On highway use .....	56 523	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Off highway use .....	39 123	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Other, including lubricating oils and greases.....	8 129	8 316	11 476	(NA)	3	2	2	(NA)
Rental cost for machinery, equipment, and buildings .....	108 462	158 238	83 666	(NA)	2	1	1	(NA)
For machinery and equipment .....	81 498	136 202	76 884	46 166	3	1	1	3
For buildings.....	26 963	22 035	6 782	(NA)	3	2	2	(NA)
Selected purchased services .....	130 664	162 848	102 592	(NA)	1	1	1	(NA)
Communication services .....	26 641	30 557	16 506	(NA)	3	2	1	(NA)
Repairs to buildings and other structures .....	6 128	8 110	4 248	(NA)	6	3	3	(NA)
Repairs to machinery and equipment .....	97 895	124 180	81 838	(NA)	2	1	1	(NA)
Ownership of construction projects:								
Value of construction work .....	5 598 712	7 809 574	4 431 332	2 512 381	1	1	1	2
Government owned .....	1 680 707	1 302 272	1 017 223	774 417	2	2	1	2
Federal.....	424 414	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
State and local .....	1 256 293	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
Privately owned .....	3 918 004	6 507 302	3 414 109	1 737 964	1	1	1	3

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

<sup>2</sup>Data were collected separately for establishments classified in SIC 1531, Operative Builders and SIC 6552, Land Subdividers and Developers, Except Cemeteries. For all other industries, data are included in other business receipts.

<sup>3</sup>For 1972, includes data for power, fuels, and lubricants.

**Table 5. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	Relative standard error of estimate (percent)	
			1987	1982
<b>BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT</b>				
Beginning-of-year gross book value of depreciable assets -----	1 227 550	1 946 624	2	1
Capital expenditures, other than land -----	81 797	185 542	3	1
New -----	59 735	144 506	4	2
Used -----	22 062	41 036	5	2
Retirements and disposition of depreciable assets -----	87 469	53 616	3	3
End-of-year gross book value of depreciable assets -----	1 221 879	2 078 549	2	1
Depreciation charges during year -----	116 241	228 990	2	1
<b>Buildings and Other Structures, Additions, and Related Facilities</b>				
Beginning-of-year gross book value of depreciable assets -----	148 857	238 180	6	2
Capital expenditures, other than land -----	11 524	23 820	13	2
New buildings and other structures -----	8 412	20 024	17	2
Used buildings and other structures -----	3 111	3 796	20	5
Retirements and disposition of depreciable assets -----	3 668	7 294	8	13
End-of-year gross book value of depreciable assets -----	156 712	254 706	6	2
Depreciation charges during year -----	12 676	23 878	7	2
<b>Machinery and Equipment</b>				
Beginning-of-year gross book value of depreciable assets -----	1 078 693	1 708 444	1	1
Capital expenditures, other than land -----	70 273	161 721	3	1
New machinery and equipment, including automobiles and trucks -----	51 323	124 482	4	2
New automobiles and trucks, intended primarily for highway use -----	20 265	36 100	5	4
Used machinery and equipment, including automobiles and trucks -----	18 950	37 239	4	1
Retirements and disposition of depreciable assets -----	83 800	46 322	3	2
End-of-year gross book value of depreciable assets -----	1 065 166	1 823 843	1	1
Depreciation charges during year -----	103 564	205 112	2	1

**Table 6. Value of Inventories for Establishments With Payroll: 1987 and 1986**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number .....	6 339	1
Value of construction work .....	5 598 712	1
Establishments with inventories:		
Number .....	2 212	5
Value of construction work .....	2 386 731	2
Inventories <sup>1</sup> :		
End of 1987, materials and supplies .....	70 568	5
End of 1986, materials and supplies .....	78 479	3
Establishments with no inventories:		
Number .....	3 166	4
Value of construction work .....	2 277 699	3
Establishments not reporting:		
Number .....	961	8
Value of construction work .....	934 282	3

<sup>1</sup>Inventories at cost or market prior to any adjustment to correct to LIFO values.



**Table 7. Selected Statistics for Establishments With Payroll by Employment Size Class: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
<b>1987</b>										
Number of establishments -----	6 339	(S)	1 289	825	450	141	65	18	5	4
All employees** -----	76 720	(S)	8 303	11 146	13 450	9 721	9 673	6 644	3 830	6 863
Payroll, all employees -----	1 476 504	(S)	118 174	193 574	253 043	195 024	217 751	162 603	105 923	136 909
Construction worker hours (thousands) -----	107 665	(S)	8 938	14 538	18 101	13 564	16 026	11 263	5 453	11 678
Dollar value business done -----	5 745 696	(S)	511 690	746 084	1 057 659	855 688	872 049	878 738	(D)	238 957
Value of construction work <sup>1</sup> -----	5 598 712	(S)	485 326	721 718	1 043 942	840 141	850 178	458 085	638 410	(D)
Net value of construction work† -----	4 500 503	(S)	393 097	604 216	804 800	1 271 713	(D)	992 738	(D)	(D)
Value added†† -----	2 826 778	(S)	241 087	363 672	482 301	380 729	392 041	325 546	193 156	201 866
Cost of materials, components, supplies, and fuels -----	1 780 289	(S)	159 944	260 526	595 167	(D)	273 163	95 955	169 022	28 393
Cost of construction work subcontracted to others -----	1 098 208	(S)	92 229	117 501	239 141	418 606	(D)	95 059	(D)	8 698
Rental cost for machinery, equipment, and buildings -----	108 462	(S)	9 730	14 382	20 574	15 221	22 235	5 404	13 632	(D)
Capital expenditures, other than land -----	81 797	(S)	10 430	10 036	14 180	10 220	29 981	(D)	(D)	(D)
End-of-year gross book value of depreciable assets -----	1 221 879	(S)	101 334	126 839	146 472	161 518	593 669	(D)	(D)	(D)
<b>1982</b>										
All employees** -----	119 557	8 869	11 184	14 961	18 876	13 605	15 269	7 657	9 712	19 424
Value of construction work <sup>1</sup> -----	7 809 574	491 477	615 302	838 749	1 256 427	1 033 017	1 076 855	603 862	703 426	1 190 458
Value added†† -----	4 133 448	231 034	299 747	411 227	610 988	470 007	593 091	354 422	424 163	738 768
<b>1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)</b>										
All employees** -----	1	(S)	6	5	3	2	(W)	(W)	(W)	(W)
Net value of construction work† -----	1	(S)	6	4	2	1	(D)	(W)	(D)	(D)
Capital expenditures, other than land -----	3	(S)	21	14	6	2	1	(D)	(D)	(D)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

**Table 8. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
<b>1987</b>											
Number of establishments -----	6 339	(S)	(S)	(S)	(S)	1 007	804	582	173	109	92
All employees** -----	76 720	(S)	(S)	(S)	(S)	7 209	8 698	11 612	7 989	7 382	24 607
Payroll, all employees -----	1 476 504	(S)	(S)	(S)	(S)	97 329	145 480	221 410	161 558	158 071	594 217
Construction worker hours (thousands) -----	107 665	(S)	(S)	(S)	(S)	8 216	9 968	16 347	11 289	10 982	40 424
Dollar value of business done -----	5 745 696	(S)	(S)	(S)	(S)	351 627	559 273	902 060	594 788	740 368	2 234 750
Value of construction work <sup>1</sup> -----	5 598 712	(S)	(S)	(S)	(S)	343 165	538 072	875 097	585 954	707 939	2 191 019
Net value of construction work† -----	4 500 503	(S)	(S)	(S)	(S)	295 585	455 338	715 378	494 843	511 109	1 706 189
Value added†† -----	2 826 778	(S)	(S)	(S)	(S)	187 839	268 666	444 305	310 583	308 497	1 111 060
Cost of materials, components, supplies, and fuels -----	1 780 289	(S)	(S)	(S)	(S)	114 335	198 115	290 373	193 093	215 406	638 860
Cost of construction work subcontracted to others -----	1 098 208	(S)	(S)	(S)	(S)	47 580	82 733	159 718	91 111	196 830	484 830
Rental cost for machinery, equipment, and buildings -----	108 462	(S)	(S)	(S)	(S)	6 619	10 225	20 493	10 649	12 566	42 117
Capital expenditures, other than land -----	81 797	(S)	(S)	(S)	(S)	6 978	8 255	14 492	4 754	8 078	32 895
End-of-year gross book value of depreciable assets -----	1 221 879	(S)	(S)	(S)	(S)	67 497	112 209	148 025	68 839	105 408	631 083
<b>1982</b>											
All employees** -----	119 557	(S)	1 513	3 022	8 033	9 339	12 029	15 593	11 431	12 154	45 380
Value of construction work <sup>1</sup> -----	7 809 574	(S)	29 208	84 215	310 558	433 468	667 639	999 319	807 266	909 217	3 558 264
Value added†† -----	4 133 448	(S)	16 156	45 490	162 001	227 350	352 129	491 805	411 657	443 673	1 977 506
<b>1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)</b>											
All employees** -----	1	(S)	(S)	(S)	(S)	7	5	3	1	1	(W)
Net value of construction work† -----	1	(S)	(S)	(S)	(S)	6	5	4	2	2	(W)
Capital expenditures, other than land -----	3	(S)	(S)	(S)	(S)	21	15	13	6	3	(W)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.



**Table 9. Value of Construction Work for Establishments With Payroll by Type of Construction: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work <sup>1</sup>				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction <sup>2</sup>	Maintenance and repair				
	A	B	C	D	A	B	C	D
<b>1987</b>								
Value of construction work <sup>1</sup> .....	5 598 712	3 182 619	1 079 416	1 112 469	1	1	2	1
<b>Building construction</b> .....	<b>2 778 609</b>	<b>1 761 291</b>	<b>656 767</b>	<b>349 461</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>3</b>
Single-family houses.....	583 271	350 059	129 304	103 907	5	8	6	8
Single-family houses, detached.....	540 323	329 153	119 093	92 076	6	8	6	9
Single-family houses, attached.....	42 947	20 905	10 211	11 830	16	26	19	24
Apartment buildings with two or more apartments.....	110 754	78 293	15 633	16 828	8	9	24	10
Other residential buildings, including hotels and motels.....	86 187	40 302	30 006	15 877	11	7	30	9
Hotels and motels.....	53 279	25 849	*18 899	8 530	16	11	43	7
Other residential buildings, excluding hotels and motels.....	32 907	14 453	11 106	7 347	12	7	30	17
Office buildings.....	460 374	309 429	108 589	42 355	3	3	6	5
Other commercial buildings such as stores, restaurants, and automobile service stations.....	414 843	261 205	114 243	39 394	4	4	8	6
Industrial buildings and warehouses.....	449 388	272 789	94 682	81 915	3	4	7	4
Industrial buildings.....	349 713	201 457	76 453	71 801	3	4	5	5
Warehouses.....	99 674	71 332	18 229	10 113	7	7	19	6
Religious buildings.....	78 254	56 259	14 293	7 700	4	4	10	7
Educational buildings.....	261 172	186 231	61 439	13 501	6	6	10	8
Hospitals and institutional buildings.....	214 977	135 878	61 692	17 407	4	4	9	6
Amusement, social, and recreational buildings.....	33 723	14 360	(S)	2 142	39	6	(S)	8
Other nonresidential buildings.....	74 576	56 486	9 666	8 435	5	6	13	12
Land development for buildings.....	(S)	(NA)	(NA)	(NA)	(S)	(NA)	(NA)	(NA)
<b>Nonbuilding construction</b> .....	<b>2 606 986</b>	<b>1 421 328</b>	<b>422 649</b>	<b>763 008</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>
Highways, streets, and related facilities.....	647 841	395 252	139 522	113 066	2	3	3	3
Bridges and elevated highways.....	106 172	(D)	*7 506	(D)	4	(D)	54	(D)
Marine construction.....	213 167	144 044	11 959	57 162	(W)	(W)	2	(W)
Conservation and development construction.....	44 698	22 463	11 818	10 416	3	1	11	1
Power and communication transmission lines, towers, and related facilities.....	106 384	59 053	28 802	18 528	7	8	5	16
Sewers, water mains, and related facilities.....	135 293	99 771	18 290	17 231	5	7	6	7
Sewers, sewer lines, and related facilities.....	82 803	59 313	12 788	10 701	6	7	5	9
Water mains and related facilities.....	52 489	40 458	5 501	6 529	9	12	10	12
Pipeline, other than sewer or water lines.....	119 268	76 885	31 071	11 310	5	5	13	12
Blast furnaces, petroleum refineries, and chemical complexes.....	786 163	236 189	112 793	437 180	1	1	1	1
Power plants, except nuclear.....	115 979	(D)	10 946	(D)	(W)	(D)	2	(D)
Sewage treatment and water treatment plants.....	86 799	60 145	22 957	3 695	5	7	1	16
Sewage treatment plants.....	61 366	44 258	14 659	2 448	6	8	2	24
Water treatment plants.....	25 432	15 887	8 298	1 246	5	8	(W)	3
Oilfields.....	64 262	31 251	7 549	25 461	10	16	13	6
Other nonbuilding construction.....	180 960	108 868	19 436	52 668	14	21	21	15
<b>Construction work, n.s.k.</b> .....	<b>213 116</b>	<b>(NA)</b>	<b>(NA)</b>	<b>(NA)</b>	<b>5</b>	<b>(NA)</b>	<b>(NA)</b>	<b>(NA)</b>
<b>1982</b>								
Value of construction work <sup>1</sup> .....	7 809 574	6 091 058	(NA)	1 718 515	1	1	(NA)	1
<b>Building construction</b> .....	<b>3 927 587</b>	<b>3 174 796</b>	<b>(NA)</b>	<b>752 791</b>	<b>1</b>	<b>1</b>	<b>(NA)</b>	<b>1</b>
Single-family houses.....	799 732	636 739	(NA)	162 992	3	3	(NA)	3
Single-family houses, detached.....	709 992	564 654	(NA)	145 337	3	4	(NA)	4
Single-family houses, attached.....	89 739	72 084	(NA)	17 654	5	6	(NA)	10
Apartment buildings with two or more apartments.....	210 236	181 264	(NA)	28 971	7	6	(NA)	7
Other residential buildings, including hotels and motels.....	173 495	158 391	(NA)	15 103	3	2	(NA)	11
Office buildings.....	922 730	822 702	(NA)	100 028	1	1	(NA)	2
Other commercial buildings such as stores, restaurants, and automobile service stations.....	293 084	241 628	(NA)	51 455	3	3	(NA)	5
Industrial buildings and warehouses.....	846 840	542 392	(NA)	304 447	1	2	(NA)	1
Industrial buildings.....	749 223	459 053	(NA)	290 170	1	2	(NA)	1
Warehouses.....	97 616	83 339	(NA)	14 277	6	5	(NA)	12
Religious buildings.....	69 718	56 960	(NA)	12 758	6	6	(NA)	11
Educational buildings.....	215 478	185 523	(NA)	29 954	4	4	(NA)	7
Hospitals and institutional buildings.....	269 715	235 090	(NA)	34 625	2	1	(NA)	4
Farm buildings.....	10 944	10 244	(NA)	700	18	17	(NA)	29
Amusement, social, and recreational buildings.....	50 246	47 106	(NA)	3 140	6	7	(NA)	20
Other nonresidential buildings.....	76 313	67 001	(NA)	9 318	3	4	(NA)	9
<b>Nonbuilding construction</b> .....	<b>3 226 493</b>	<b>2 388 873</b>	<b>(NA)</b>	<b>837 620</b>	<b>(W)</b>	<b>(W)</b>	<b>(NA)</b>	<b>1</b>
Highways, streets, and related facilities.....	635 778	405 410	(NA)	230 367	1	2	(NA)	1
Bridges, tunnels, and elevated highways.....	38 659	27 591	(NA)	11 067	4	1	(NA)	16
Marine construction.....	328 931	240 067	(NA)	88 864	(W)	(W)	(NA)	1
Harbor and port facilities.....	73 189	52 790	(NA)	20 399	2	1	(NA)	4
Conservation and development construction.....	45 909	37 018	(NA)	8 891	6	7	(NA)	2
Power and communication transmission lines, towers, and related facilities.....	111 064	83 773	(NA)	27 290	5	5	(NA)	4
Sewers, water mains, and related facilities.....	133 256	111 236	(NA)	22 020	3	3	(NA)	6
Sewers, sewer lines, and related facilities.....	76 017	65 061	(NA)	10 956	4	4	(NA)	9
Water mains and related facilities.....	57 238	46 175	(NA)	11 063	4	4	(NA)	9
Pipeline, other than sewer or water lines.....	396 535	352 135	(NA)	44 400	1	1	(NA)	2
Blast furnaces, petroleum refineries, and chemical complexes.....	750 602	481 296	(NA)	269 306	(W)	(W)	(NA)	1
Power plants.....	146 918	113 069	(NA)	33 849	1	1	(NA)	1
Power plants, nuclear.....	24 960	18 146	(NA)	6 814	(W)	(W)	(NA)	(W)
Power plants, except nuclear.....	121 957	94 923	(NA)	27 034	1	1	(NA)	1
Sewage treatment and water treatment plants.....	63 534	53 370	(NA)	10 163	4	3	(NA)	14
Sewage treatment plants.....	46 101	39 592	(NA)	6 508	6	4	(NA)	22
Water treatment plants.....	17 433	13 778	(NA)	3 655	(W)	(W)	(NA)	1
Oilfields.....	376 879	341 308	(NA)	35 571	1	1	(NA)	7
Other nonbuilding construction.....	761 016	495 219	(NA)	265 800	5	5	(NA)	11
<b>Construction work, n.s.k.</b> .....	<b>655 493</b>	<b>527 389</b>	<b>(NA)</b>	<b>128 104</b>	<b>3</b>	<b>3</b>	<b>(NA)</b>	<b>2</b>

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

<sup>2</sup>In 1982, data for additions, alterations, or reconstruction were not collected separately. These data are included with "New construction".



**Table 10. Quarterly Construction Worker Hours and Employment With Payroll by Industry:**

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Number of establishments	Average number of construction workers	Construction worker hours (thousands)	January to March		April to June	
					Construction workers <sup>1</sup>	Hours worked (thousands)	Construction workers <sup>1</sup>	Hours worked (thousands)
		A	B	C	D	E	F	G
	<b>Construction industries and land subdividers and developers -----</b>	<b>6 339</b>	<b>62 823</b>	<b>107 665</b>	<b>61 939</b>	<b>25 597</b>	<b>63 907</b>	<b>27 078</b>
<b>15, 16, 17</b>	<b>Construction industries:</b>							
<b>15</b>	<b>Building construction—General contractors and operative builders:</b>							
152	General contractors, residential buildings:							
1521	Single-family houses -----	812	1 870	2 569	1 797	660	2 037	666
1522	Other residential buildings -----	74	493	1 014	322	113	435	221
1531	Operative builders -----	146	254	354	236	77	275	101
154	General contractors, nonresidential buildings:							
1541	Industrial buildings and warehouses -----	112	1 537	2 690	1 428	641	1 487	646
1542	Nonresidential buildings, n.e.c. -----	472	4 875	8 530	4 826	2 098	5 042	2 162
<b>16</b>	<b>Heavy construction other than building construction—contractors:</b>							
1611	Highway and street construction -----	164	5 973	10 506	5 019	1 977	6 153	2 746
162	Heavy construction, except highway:							
1622	Bridge, tunnel, and elevated highway construction -----	16	614	973	570	206	608	237
1623	Water, sewer, and utility lines -----	194	3 365	6 036	3 174	1 397	3 267	1 454
1629	Heavy construction, n.e.c. -----	333	15 217	27 949	16 342	7 056	15 976	7 234
<b>17</b>	<b>Special trade contractors:</b>							
1711	Plumbing, heating, and air-conditioning ----	919	4 825	8 597	5 002	2 127	4 937	2 193
1721	Painting and paper hanging -----	324	2 666	4 153	2 469	969	2 801	949
1731	Electrical work -----	766	6 358	11 435	6 197	2 777	5 981	2 665
174	Masonry, stonework, tile setting, and plastering:							
1741	Masonry, stone setting, and other stonework -----	202	1 732	1 988	1 745	523	1 710	463
1742	Plastering, drywall, and insulation work --	176	2 305	3 972	2 340	1 019	2 229	914
1743	Terrazzo, tile, marble, and mosaic work --	37	204	407	228	110	224	114
175	Carpentry and floor work:							
1751	Carpentry -----	244	684	1 016	705	223	766	296
1752	Floor laying and other floor work -----	104	318	455	320	103	292	113
1761	Roofing, siding, and sheet metal work -----	306	2 379	3 803	2 400	910	2 370	954
1771	Concrete work -----	94	752	1 033	730	213	765	261
1781	Water well drilling -----	32	172	289	159	67	187	81
179	Miscellaneous special trade contractors:							
1791	Structural steel erection -----	95	955	1 510	1 001	374	964	425
1793	Glass and glazing work -----	61	437	741	427	169	445	185
1794	Excavation work -----	104	(S)	(S)	(S)	(S)	(S)	(S)
1795	Wrecking and demolition work -----	*15	107	154	117	38	98	40
1796	Installing building equipment, n.e.c. -----	80	863	1 488	900	392	931	399
1799	Special trade contractors, n.e.c. -----	347	3 248	4 860	2 883	1 081	3 293	1 253
<b>6552</b>	<b>Land subdividers and developers, n.e.c. --</b>	<b>98</b>	<b>*189</b>	<b>*461</b>	<b>167</b>	<b>*98</b>	<b>*193</b>	<b>*130</b>

<sup>1</sup>Construction workers during pay periods including 12th of March, May, August, and November.

July to September		October to December		Relative standard error of estimate (percent) for column—										1987 SIC code
Construction workers¹	Hours worked (thousands)	Construction workers¹	Hours worked (thousands)											
H	I	J	K	B	C	D	E	F	G	H	I	J	K	
63 829	27 818	61 616	27 169	1	1	1	1	1	1	1	1	1	1	15, 16, 17
														15
1 874 663	622 *377	1 772 551	620 301	10 21	12 32	10 15	12 19	11 23	12 33	11 26	13 41	11 20	13 31	152 1521 1522
292	99	213	76	14	23	13	20	14	21	17	30	16	23	1531
														154
1 735 4 895	739 2 135	1 497 4 739	663 2 133	8 4	8 5	8 5	9 6	7 5	9 6	10 5	9 6	8 5	6 6	1541 1542
														16
6 409	2 998	6 310	2 784	3	4	3	4	3	4	3	3	3	4	1611
														162 1622
664 3 648 14 357	274 1 693 6 609	612 3 373 14 193	254 1 490 7 048	10 4 1	15 5 1	11 5 1	12 6 1	10 5 1	14 6 2	9 4 1	15 6 1	12 4 1	20 4 1	1623 1629
														17
4 904	2 246	4 456	2 028	4	5	6	5	5	5	3	5	4	6	1711
2 730	1 133	2 666	1 100	6	7	6	8	8	8	6	7	7	10	1721
6 585	2 940	6 668	3 050	2	3	2	3	3	4	3	4	3	4	1731
														174
														1741
1 723 2 261 186	508 936 95	1 749 2 390 179	492 1 101 87	10 5 12	11 5 13	8 5 11	8 6 10	11 5 13	12 4 12	10 6 15	12 6 20	15 5 17	16 6 19	1742 1743
														175
711 347	267 137	552 314	227 100	11 14	19 19	12 13	16 17	14 15	21 19	15 14	24 19	13 18	22 21	1751 1752
2 598	1 080	2 148	857	9	6	8	6	8	6	10	7	9	7	1761
791	304	724	253	18	19	19	22	18	20	17	19	19	18	1771
175	75	166	65	15	8	15	5	16	8	15	9	15	11	1781
														179
979 445 (S) 86 771 3 342	389 192 (S) 39 339 1 263	875 431 (S) 129 849 3 474	320 193 (S) 36 357 1 262	6 4 (S) 24 7 5	9 4 (S) (W) 7 6	7 4 (S) 32 12 4	10 4 (S) (W) 15 5	8 4 (S) 23 6 6	11 3 (S) (W) 6 6	7 4 (S) (W) 8 5	11 4 (S) (W) 6 6	7 5 (S) (W) 8 7	9 4 (S) (W) 10 7	1791 1793 1794 1795 1796 1799
*213	*135	*182	*97	42	47	40	45	42	47	43	52	44	44	6552



**Table 11. Selected Industry Ratios for Establishments With Payroll in This State: 1987**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Average number of employees** per estab- lishment	Payroll per employee (\$1,000)	Construction worker hours per construction worker	Value of construction work per construction worker (\$1,000)	Average per dollar of value of construction work			
						Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Rental cost for machinery, equipment, and buildings
	<b>Construction industries and land subdividers and developers</b> .....	<b>12.1</b>	<b>19.2</b>	<b>1 713.8</b>	<b>89.1</b>	<b>.264</b>	<b>.318</b>	<b>.196</b>	<b>.019</b>
15, 16, 17	<b>Construction industries:</b>								
15	<b>Building construction—General contractors and operative builders:</b>								
152	General contractors, residential buildings:								
1521	Single-family houses .....	3.4	13.1	1 373.8	115.9	.167	.349	.260	.008
1522	Other residential buildings .....	8.9	17.1	2 056.8	156.7	.146	(D)	.430	*.008
1531	Operative builders .....	4.2	17.2	(S)	456.1	.091	.354	.461	.003
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses .....	16.9	18.7	1 750.2	101.2	.229	.275	.260	.024
1542	Nonresidential buildings, n.e.c. ....	13.7	18.4	1 749.7	186.7	.131	.223	.547	.010
16	<b>Heavy construction other than building construction—contractors:</b>								
1611	Highway and street construction .....	43.0	21.6	1 758.9	123.4	.206	.426	.164	.018
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction .....	43.9	18.9	1 584.7	104.8	.206	(D)	.227	.016
1623	Water, sewer, and utility lines .....	20.8	19.3	1 793.8	81.2	.285	.308	.094	.040
1629	Heavy construction, n.e.c. ....	51.1	21.7	1 836.7	66.3	.366	.254	.107	.033
17	<b>Special trade contractors:</b>								
1711	Plumbing, heating, and air-conditioning .....	7.1	18.4	1 781.8	95.9	.257	.403	.130	.016
1721	Painting and paper hanging .....	9.4	15.5	1 557.8	48.1	.368	.212	.084	.022
1731	Electrical work .....	10.3	21.5	1 798.5	77.6	.344	.358	.027	.013
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework .....	9.9	14.8	1 147.8	54.3	.315	(D)	*.052	.016
1742	Plastering, drywall, and insulation work .....	15.3	20.9	1 723.2	59.1	.413	(D)	.067	.013
1743	Terrazzo, tile, marble, and mosaic work .....	7.4	17.6	1 995.1	63.7	.369	(D)	*.053	.009
175	Carpentry and floor work:								
1751	Carpentry .....	3.6	14.7	1 485.4	85.3	.221	.360	.094	.008
1752	Floor laying and other floor work .....	4.1	13.1	1 430.8	81.0	.217	.364	.072	.012
1761	Roofing, siding, and sheet metal work .....	9.9	15.7	1 598.6	65.6	.306	.361	.051	.014
1771	Concrete work .....	9.9	12.7	1 373.7	67.5	.232	.403	.097	.035
1781	Water well drilling .....	6.9	18.2	1 680.2	74.6	.313	(D)	.011	*.028
179	Miscellaneous special trade contractors:								
1791	Structural steel erection .....	11.9	17.8	1 581.2	63.4	.332	.312	.080	.022
1793	Glass and glazing work .....	9.3	20.6	1 695.7	88.8	.301	.496	(S)	.009
1794	Excavation work .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1795	Wrecking and demolition work .....	*8.9	14.1	1 439.3	76.7	.231	.155	.075	.034
1796	Installing building equipment, n.e.c. ....	13.3	24.4	1 724.2	79.4	.380	.261	.022	.011
1799	Special trade contractors, n.e.c. ....	10.8	18.1	1 496.3	54.5	.384	.325	.041	.030
6552	<b>Land subdividers and developers, n.e.c.</b> .....	<b>*4.2</b>	<b>*15.4</b>	<b>*2 439.2</b>	<b>*129.1</b>	<b>*.260</b>	<b>*.159</b>	<b>*.410</b>	<b>*.006</b>

Table 12. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>NEW ORLEANS, LA MSA</b>											
	<b>Construction industries and land subdividers and developers .....</b>	<b>1 866</b>	<b>20 062</b>	<b>391 679</b>	<b>1 553 983</b>	<b>1 236 134</b>	<b>779 683</b>	<b>478 891</b>	<b>317 849</b>	<b>14 641</b>	<b>2</b>	<b>2</b>
15,16, 17	<b>Construction industries:</b>											
	<b>Building construction—General contractors and operative builders:</b>											
152	General contractors, residential buildings:											
1521	Single-family houses .....	236	838	11 870	59 531	44 200	28 705	16 459	15 331	84	13	12
1522	Other residential buildings .....	42	282	4 806	25 258	15 664	9 594	(D)	9 594	(D)	24	27
1531	Operative builders .....	42	343	6 201	52 138	29 777	11 274	18 647	22 361	*370	11	18
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses .....	13	374	8 284	51 483	39 729	25 293	(D)	11 754	(D)	10	4
1542	Nonresidential buildings, n.e.c. ....	144	2 166	47 494	315 951	149 522	89 979	67 749	166 429	2 525	7	4
16	<b>Heavy construction other than building construction—contractors:</b>											
1611	Highway and street construction .....	28	1 394	37 114	137 694	119 327	71 404	(D)	18 366	*864	9	4
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction .....	-	-	-	-	-	-	-	-	-	-	-
1623	Water, sewer, and utility lines .....	15	650	12 515	48 237	42 196	28 145	(D)	6 041	744	7	8
1629	Heavy construction, n.e.c. ....	49	1 126	27 250	94 984	88 081	62 080	26 730	6 903	1 952	8	3
17	<b>Special trade contractors:</b>											
1711	Plumbing, heating, and air- conditioning .....	338	2 585	48 614	178 960	153 062	86 869	67 168	25 897	1 678	7	3
1721	Painting and paper hanging .....	93	747	14 015	41 197	38 034	28 729	9 305	3 163	201	12	21
1731	Electrical work .....	258	2 951	64 265	188 213	185 312	116 171	69 509	2 901	1 687	3	3
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework .....	40	980	16 402	57 885	53 797	32 683	(D)	*4 088	*86	18	29
1742	Plastering, drywall, and insulation work .....	65	743	10 692	29 957	26 101	14 086	(D)	3 856	139	14	13
1743	Terrazzo, tile, marble, and mosaic work .....	14	136	2 833	8 797	(D)	4 849	3 311	(D)	(D)	12	(D)
175	Carpentry and floor work:											
1751	Carpentry .....	59	295	4 711	17 120	15 205	9 388	(D)	1 916	191	16	16
1752	Floor laying and other floorwork .....	42	144	2 019	10 367	9 707	7 287	2 921	*660	*104	10	19
1761	Roofing, siding, and sheet metal work .....	136	1 529	20 737	74 167	70 549	47 029	24 802	3 618	826	14	9
1771	Concrete work .....	30	383	4 596	15 777	15 212	10 438	5 040	565	*125	27	28
1781	Water well drilling .....	6	*37	*879	*1 659	*1 653	*1 288	(D)	6	-	44	43
179	Miscellaneous special trade contractors:											
1791	Structural steel erection .....	33	384	6 835	17 451	16 450	11 858	(D)	1 002	199	8	8
1793	Glass and glazing work .....	26	369	8 385	28 784	27 448	14 184	13 954	(S)	(S)	7	3
1794	Excavation work .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1795	Wrecking and demolition work .....	3	43	454	1 481	(D)	1 209	194	(D)	(D)	(W)	(D)
1796	Installing building equipment, n.e.c. ....	34	503	13 503	33 811	(D)	26 993	9 039	(D)	426	8	(D)
1799	Special trade contractors, n.e.c. ....	74	735	12 474	42 633	38 941	27 863	12 042	3 693	*1 219	7	10
6552	<b>Land subdividers and developers, n.e.c. ....</b>	<b>*22</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>





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# SUMMARY OF FINDINGS

This report provides results from the 1987 Census of Construction Industries for Oklahoma. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property into lots, as defined in the 1987 Standard Industrial Classification (SIC) Manual. The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters. In addition, this census also includes one industry classified under "Real Estate" in the Manual, SIC 6552, Land Subdividers and Developers, Except Cemeteries.

During 1987, there were 31,097 establishments in this State operating in the construction industries or as land subdividers and developers. These establishments accounted for \$4.1 billion in total value of business done.

Most of the 31,097 construction establishments were small. Of the total, 25,893 were nonemployers, and over half of the employer establishments had less than 5 employees. The 2,014 construction establishments with 5 employees or more, while representing only 6 percent of all establishments, accounted for more than 65 percent of the total value of business done.

## ESTABLISHMENTS WITH PAYROLL

During 1987, the establishments with paid employees accounted for \$3.1 billion on total dollar value of business done. Of this amount, \$3.0 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$688 million, leaving net value of construction work of \$2.3 billion. In addition, these establishments paid out \$1.1 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1987 was \$1.4 billion. (See Introduction and appendixes for explanation of terms.)

There were 5,204 establishments with total employment averaging 38,728 during the year. Total payroll for 1987 was \$724 million. Total hours worked by construction workers during the year were 50.0 million hours.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

In 1987, the value of construction work was collected to better measure actual construction activity done during the year. Construction receipts, as reported in earlier censuses, may have included the value of work done before or after the calendar year and may have also excluded work done by builders for their own use. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.



Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

## ESTABLISHMENTS WITHOUT PAYROLL

During 1987, there were 25,893 establishments with no payroll classified as construction or land subdividers and developers. According to administrative records of the Federal Government, their value of business done during 1987 was \$932 million. Most of these establishments, about 78 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in tables 1 and 2 of this report.

Figure 1. **Selected Costs Per Dollar Value of Business Done**  
(Percent)

1987   
1982 

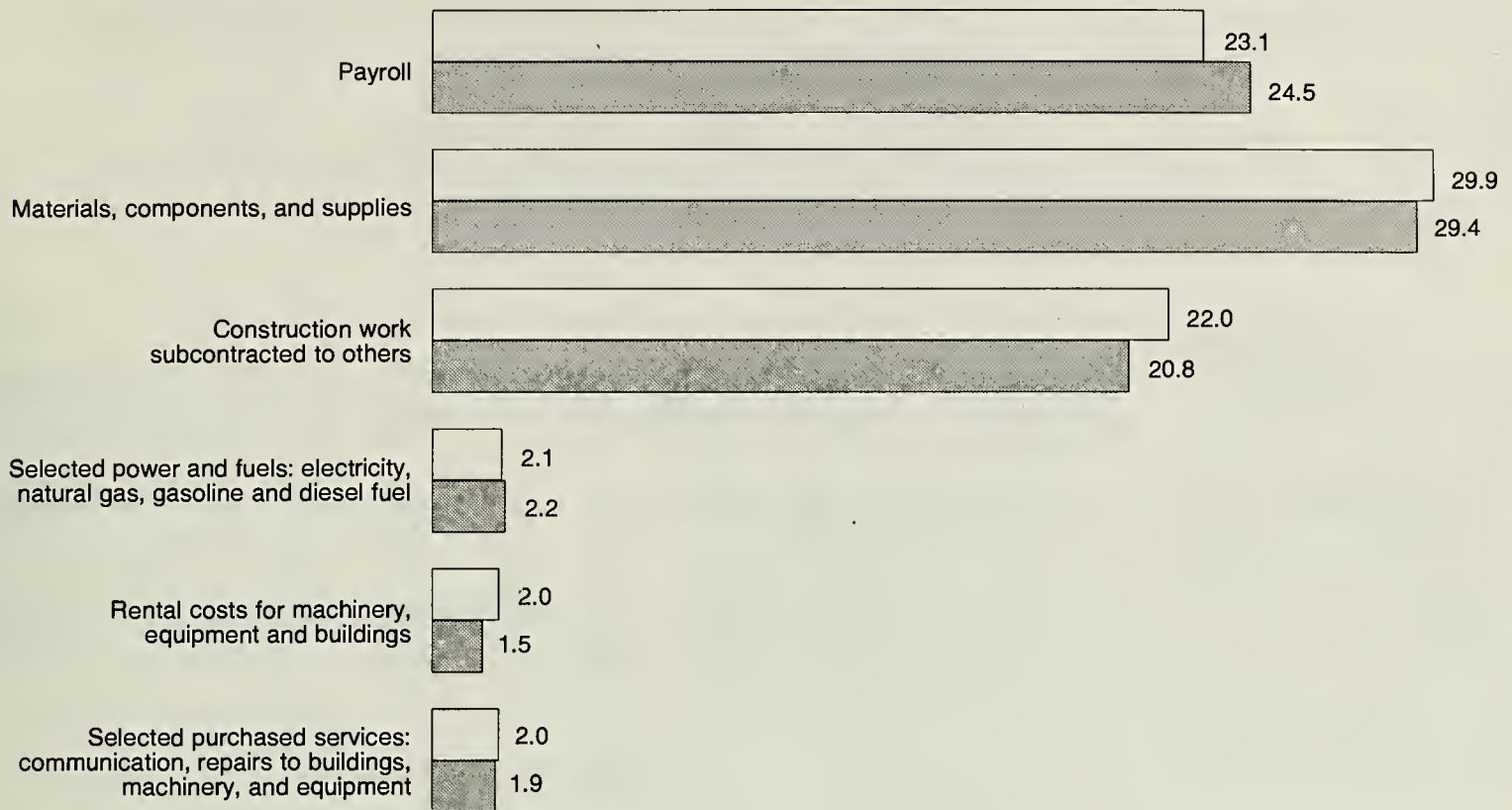


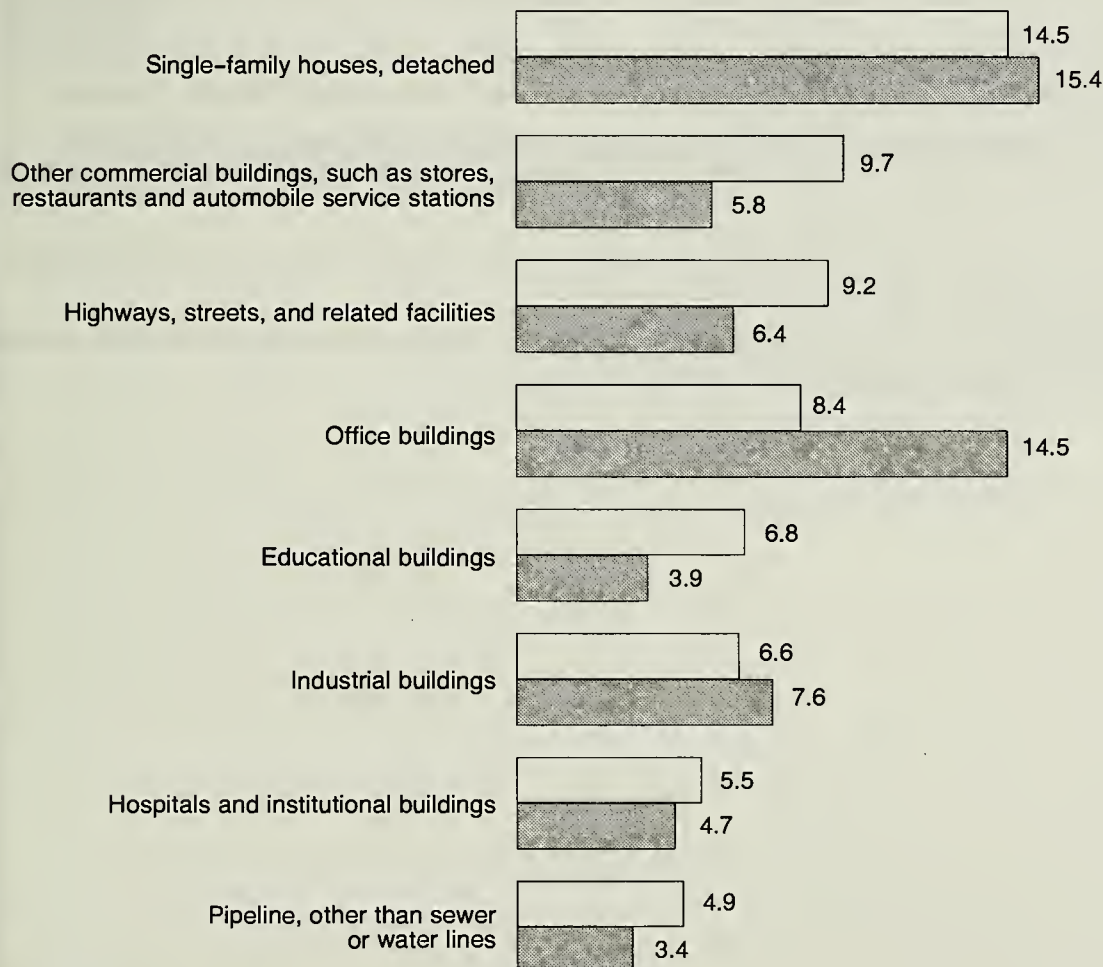


Figure 2. **Value of Construction Work by Type of Construction**  
(Percent)

1987   
1982 





**Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprie- tors and working partners	All em- ployees**	Dollar value of business done	Number	Proprie- tors and working partners	Dollar value of business done	Number	Proprie- tors and working partners	All em- ployees**	Dollar value of business done¹		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1987													
	Construction industries and land subdividers and developers .....	31 097	26 713	38 728	4 061 548	25 893	25 451	931 706	5 204	1 282	38 728	3 129 840	1	2
15, 16, 17	Construction industries .....	30 458	26 174	38 358	3 967 124	25 343	24 918	882 884	5 115	1 256	38 356	3 104 240	1	2
15	Building construction—General contractors and operative builders .....	5 582	4 306	7 639	1 372 764	4 511	4 138	336 791	1 071	168	7 639	1 035 973	4	4
16	Heavy construction other than building construction— contractors .....	1 405	797	10 582	893 411	685	678	41 705	720	119	10 582	851 706	2	2
17	Special trade contractors .....	23 471	21 071	20 135	1 700 949	20 147	20 102	484 388	3 324	969	20 135	1 216 561	2	2
1711	Plumbing, heating, and air-conditioning ..	3 083	2 415	4 858	435 226	2 193	2 174	72 463	890	241	4 858	362 763	3	3
1731	Electrical work .....	1 954	1 455	4 006	273 844	1 361	1 345	39 745	593	110	4 006	234 099	4	3
6552	Land subdividers and developers, n.e.c.² .....	627	(S)	(S)	(S)	550	533	68 822	77	(S)	(S)	(S)	(S)	(S)
	1982													
	Construction industries and land subdividers and developers .....	32 234	27 577	63 606	5 676 008	25 153	25 055	1 327 102	7 081	2 522	63 606	4 348 906	1	1
15, 16, 17	Construction industries .....	31 751	27 180	63 277	5 552 199	24 759	24 672	1 229 639	6 992	2 508	63 277	4 322 560	1	1
15	Building construction—General contractors and operative builders .....	4 833	3 316	14 952	2 107 288	3 103	2 901	539 768	1 730	415	14 952	1 567 520	2	2
16	Heavy construction other than building construction— contractors .....	1 296	839	14 085	920 445	650	648	41 191	646	191	14 085	879 254	1	1
17	Special trade contractors .....	25 622	23 025	34 240	2 524 466	21 006	21 123	648 680	4 616	1 502	34 240	1 875 786	1	1
1711	Plumbing, heating, and air-conditioning ..	2 666	2 098	6 837	531 877	1 651	1 662	83 768	1 015	436	6 837	448 109	4	3
1731	Electrical work .....	1 646	1 188	5 778	353 028	1 026	1 020	45 722	620	168	5 778	307 306	4	3
6552	Land subdividers and developers, n.e.c.² .....	481	395	323	123 806	394	383	97 463	87	12	323	26 343	12	13

Note: Number of establishments in this and subsequent tables represent those in business at any time during the year.

¹For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.

²For establishments without payroll, may also include data for an unknown number of cemetery subdividers and developers.

**Table 2. Summary Statistics by Size Class of Dollar Value of Business Done for Establishments With and Without Payroll : 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Receipts size	All establishments				Establishments without payroll <sup>1</sup>			Establishments with payroll				Relative standard error of estimate (percent) for column—	
	Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done	Number	Proprietors and working partners	All employees**	Dollar value of business done <sup>2</sup>		
	A	B	C	D	E	F	G	H	I	J	K	J	K
<b>1987</b>													
<b>The State</b> .....	31 097	26 713	38 728	4 061 546	25 893	25 451	931 706	5 204	1 262	38 728	3 129 840	1	2
\$10,000,000 or more .....	37	2	4 882	(D)	1	—	(D)	36	2	4 882	630 830	(W)	(W)
\$5,000,000 to \$9,999,999 .....	63	3	4 000	1 078 943	4	1	37 734	59	2	4 000	410 379	2	3
\$2,500,000 to \$4,999,999 .....	141	12	4 774	494 636	9	8	29 736	132	4	4 774	464 900	3	8
\$1,000,000 to \$2,499,999 .....	471	89	6 950	707 276	42	31	63 018	429	58	6 950	644 258	5	6
\$500,000 to \$999,999 .....	686	156	5 609	475 576	138	103	95 399	548	53	5 609	380 177	6	6
 \$250,000 to \$499,999 .....	1 105	437	4 493	387 770	320	278	109 986	785	159	4 493	277 784	7	7
\$100,000 to \$249,999 .....	2 603	1 523	5 185	406 659	1 180	1 087	176 069	1 423	436	5 185	230 590	6	6
\$50,000 to \$99,999 .....	(S)	(S)	(S)	(S)	2 181	2 124	151 241	(S)	(S)	(S)	(S)	(S)	(S)
\$25,000 to \$49,999 .....	(S)	(S)	(S)	(S)	3 470	3 393	122 902	(S)	(S)	(S)	(S)	(S)	(S)
 Less than \$25,000 .....	(S)	(S)	(S)	(S)	18 548	18 426	145 620	(S)	(S)	(S)	(S)	(S)	(S)
\$10,000 to \$24,999 .....	(NA)	(NA)	(NA)	(NA)	5 934	5 884	95 685	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999 .....	(NA)	(NA)	(NA)	(NA)	4 328	4 293	31 509	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,000 to \$4,999 .....	(NA)	(NA)	(NA)	(NA)	3 323	3 308	12 176	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,000 .....	(NA)	(NA)	(NA)	(NA)	4 963	4 941	6 250	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
<b>1982</b>													
<b>The State</b> .....	32 234	27 577	63 606	5 676 008	25 153	25 055	1 327 102	7 081	2 522	63 606	4 348 906	1	1
\$10,000,000 or more .....	43	5	10 453	(D)	2	—	(D)	41	5	10 453	(D)	(W)	(D)
\$5,000,000 to \$9,999,999 .....	94	6	5 475	1 884 583	5	5	272 739	89	1	5 475	1 611 844	(W)	(W)
\$2,500,000 to \$4,999,999 .....	192	28	7 481	660 061	10	13	33 158	182	15	7 481	626 903	(W)	(W)
\$1,000,000 to \$2,499,999 .....	593	120	11 089	884 356	72	63	101 240	521	57	11 089	783 116	2	3
\$500,000 to \$999,999 .....	1 017	331	9 592	698 930	207	170	139 211	810	161	9 592	559 719	5	5
 \$250,000 to \$499,999 .....	1 438	658	7 668	501 591	404	369	139 368	1 034	289	7 668	362 223	6	5
\$100,000 to \$249,999 .....	3 291	2 247	7 435	512 696	1 407	1 386	213 568	1 884	861	7 435	299 128	4	5
\$50,000 to \$99,999 .....	3 338	2 774	2 345	233 790	2 318	2 354	160 604	1 020	420	2 345	73 186	7	6
\$25,000 to \$49,999 .....	4 194	3 844	973	147 769	3 605	3 598	125 833	589	246	973	21 936	8	8
 Less than \$25,000 .....	18 033	17 563	1 093	152 231	17 123	17 097	141 381	910	466	1 093	10 850	7	7
\$10,000 to \$24,999 .....	(NA)	(NA)	(NA)	(NA)	6 225	6 230	98 394	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999 .....	(NA)	(NA)	(NA)	(NA)	4 262	4 265	28 845	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,500 to \$4,999 .....	(NA)	(NA)	(NA)	(NA)	3 977	3 969	11 483	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,500 .....	(NA)	(NA)	(NA)	(NA)	2 659	2 633	2 659	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Underscored data fields include data from adjoining lines which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>For establishments without payroll, may include data for an unknown number of cemetery subdividers and developers.

<sup>2</sup>For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.



Table 3. General Statistics for Establishments With Payroll by Industry: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	1987							
		Number of establish- ments	Employees**		Payroll		Construction worker hours (thousands)	Value of construction work	Net value of construction work†
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
	Construction industries and land subdividers and developers -----	5 204	38 728	30 393	724 364	531 469	49 965	3 030 883	2 342 871
15, 16, 17	Construction Industries:								
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	529	1 700	1 056	25 157	13 490	1 317	173 060	112 381
1522	Other residential buildings -----	42	250	179	3 507	1 910	*200	28 203	13 034
1531	Operative builders -----	124	*645	*403	10 811	*4 568	*574	108 305	63 301
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	53	592	476	13 644	10 608	939	57 246	36 769
1542	Nonresidential buildings, n.e.c. -----	323	4 452	3 390	87 884	58 040	5 106	640 077	290 596
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	147	3 048	2 581	58 193	44 503	4 910	323 558	271 235
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	31	649	572	12 499	9 283	963	62 085	55 887
1623	Water, sewer, and utility lines -----	212	3 097	2 595	82 324	65 385	4 871	224 745	207 019
1629	Heavy construction, n.e.c. -----	330	3 788	3 102	61 823	48 081	5 125	203 689	172 352
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	890	4 858	3 691	91 440	67 185	6 479	357 830	322 685
1721	Painting and paper hanging -----	253	998	876	16 737	13 296	1 213	43 812	41 920
1731	Electrical work -----	593	4 006	3 070	79 431	59 984	5 396	231 531	220 406
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	123	515	471	7 489	6 651	681	19 320	19 044
1742	Plastering, drywall, and insulation work -----	160	1 397	1 171	26 584	21 630	1 879	74 300	66 650
1743	Terrazzo, tile, marble, and mosaic work -----	29	150	119	3 018	2 027	135	9 105	9 044
175	Carpentry and floor work:								
1751	Carpentry -----	222	844	699	11 942	9 116	1 022	44 787	38 578
1752	Floor laying and other floor work -----	41	223	167	3 721	2 783	258	13 327	12 045
1761	Roofing, siding, and sheet metal work -----	248	2 179	1 718	36 946	26 432	2 525	123 105	115 598
1771	Concrete work -----	188	1 169	1 050	15 274	13 069	1 375	52 610	49 497
1781	Water well drilling -----	27	115	83	1 673	1 329	164	5 956	5 935
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	60	641	542	11 889	9 239	908	39 927	37 683
1793	Glass and glazing work -----	68	349	236	7 714	5 655	555	19 919	19 697
1794	Excavation work -----	104	585	480	9 394	7 027	796	27 394	26 425
1795	Wrecking and demolition work -----	*26	131	100	3 007	2 134	147	8 336	8 260
1796	Installing building equipment, n.e.c. -----	29	279	217	7 595	6 070	382	22 697	22 550
1799	Special trade contractors, n.e.c. -----	263	1 696	1 287	28 574	20 923	1 931	99 724	91 285
6552	Land subdividers and developers, n.e.c. -----	77	(S)	(S)	(S)	(S)	(S)	(S)	(S)

†In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

1987--Con.						1982			Relative standard error of estimate (percent) for column--			1987 SIC code
Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Total construction receipts¹	Value added††				
I	J	K	L	M	N	O	P	Q	B	H	M	
1 421 363	999 598	688 011	62 781	49 442	567 369	63 606	4 236 025	2 038 342	1	1	5	15, 16, 17
												15
55 181 *9 023	63 322 4 045	60 679 15 169	2 392 229	1 204 77	25 050 *1 608	4 550 442	281 087 48 292	109 520 10 868	9 24	13 36	25 38	152 1521 1522
*23 825	43 677	45 004	709	343	12 794	1 551	184 604	55 762	42	22	31	1531
21 728 150 301	17 811 143 125	20 476 349 480	551 5 273	543 3 159	5 990 33 110	1 253 7 156	122 244 893 096	32 820 252 851	13 4	14 5	3 18	154 1541 1542
												16
164 600	121 817	52 322	13 041	10 362	104 604	3 142	258 753	125 878	4	4	8	1611
34 913 164 829 105 203	(D) 44 498 86 132	6 198 17 726 31 337	831 11 403 8 625	765 8 395 5 819	10 931 109 511 61 251	463 5 639 4 841	34 022 272 918 297 028	18 394 170 602 180 692	5 5 5	6 3 6	13 17 17	162 1622 1623 1629
												17
184 434	143 184	35 144	5 427	6 443	48 056	6 837	440 469	217 786	3	3	16	1711
32 356	9 874	1 892	508	736	9 352	1 746	60 477	39 817	12	15	24	1721
129 881	93 092	11 125	3 406	3 318	38 906	5 778	298 240	175 874	4	3	15	1731
12 162 42 728 4 955	6 905 (D) (D)	276 7 650 60	73 1 082 39	*478 329 (S)	4 370 8 191 2 326	1 375 3 188 228	46 337 202 510 13 442	29 993 129 262 6 825	17 8 19	15 6 15	41 18 (S)	174 1741 1742 1743
25 168 6 641	(D) 5 835	6 209 1 282	297 141	193 *147	5 858 911	2 292 284	80 439 17 533	45 332 8 119	9 27	8 21	25 56	175 1751 1752
67 499	50 882	7 506	1 809	1 918	21 572	2 569	129 485	69 604	7	6	17	1761
31 456	18 148	3 112	1 144	721	10 096	2 135	91 421	48 694	11	9	29	1771
3 798	(D)	21	218	28	*4 822	371	22 066	14 716	28	28	25	1781
26 582 10 506 21 975 7 713 17 533 58 742	11 803 10 045 5 008 778 5 114 38 430	2 244 222 968 76 147 8 438	725 535 719 191 308 2 862	732 *77 636 386 51 2 210	8 567 2 804 9 000 5 983 922 16 164	1 080 420 2 611 130 688 2 508	59 919 28 009 159 054 6 487 52 788 119 979	40 668 14 798 114 928 5 522 36 398 72 823	14 6 17 23 8 9	17 9 15 18 5 10	14 42 26 16 (W) 38	179 1791 1793 1794 1795 1796 1799
(S)	(S)	(S)	(S)	(S)	(S)	323	15 323	9 787	(S)	(S)	(S)	6552



**Table 4. Detailed Statistics for Establishments With Payroll: 1987 and Earlier Census Years**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	1977	1972	Relative standard error of estimate (percent)			
					1987	1982	1977	1972
Number of establishments in business during year .....	5 204	7 081	6 970	6 337	1	2	3	3
Proprietors and working partners .....	1 262	2 522	4 674	4 612	7	4	5	5
All employees** .....	38 728	63 606	51 848	52 122	1	1	1	2
Construction workers:								
March .....	28 590	51 657	41 269	41 160	2	1	2	2
May .....	31 446	52 875	46 466	45 547	2	1	2	3
August .....	31 848	54 038	46 740	50 371	2	1	2	3
November .....	29 690	51 014	42 940	42 425	2	2	2	2
Average .....	30 393	52 980	44 393	45 432	2	1	1	2
Other employees:								
March .....	8 431	10 379	7 260	6 529	2	2	2	3
May .....	8 192	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
August .....	8 378	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
November .....	8 337	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Average .....	8 334	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Construction worker hours (thousands):								
January to March .....	11 123	20 226	(NA)	(NA)	2	1	(NA)	(NA)
April to June .....	13 009	22 224	(NA)	(NA)	2	1	(NA)	(NA)
July to September .....	13 440	22 963	(NA)	(NA)	2	1	(NA)	(NA)
October to December .....	12 391	21 428	(NA)	(NA)	2	1	(NA)	(NA)
Total hours worked .....	49 965	86 843	(NA)	(NA)	2	1	(NA)	(NA)
Payroll, all employees .....	724 364	1 065 202	579 070	392 205	1	1	1	2
Payroll, construction workers .....	531 469	831 850	462 678	322 152	1	1	1	2
Payroll, other employees .....	192 895	233 352	116 392	70 053	2	1	1	3
First quarter payroll, all employees .....	160 073	241 577	126 530	(NA)	2	1	1	(NA)
Employer costs for fringe benefits, all employees .....	144 910	185 664	95 904	(NA)	1	1	1	(NA)
Legally required expenditures .....	109 736	139 651	66 839	(NA)	2	1	1	(NA)
Voluntary expenditures .....	35 173	46 012	29 066	(NA)	2	1	1	(NA)
Dollar value of business done .....	3 129 840	4 348 906	2 468 733	1 651 297	2	1	1	2
Value of construction work <sup>1</sup> .....	3 030 883	4 236 025	2 366 954	1 603 964	2	1	1	2
Value of construction work subcontracted in from others .....	639 344	1 017 740	567 849	328 659	3	2	2	5
Land receipts <sup>2</sup> .....	20 867	32 444	(NA)	(NA)	16	7	(NA)	(NA)
Other business receipts .....	78 089	80 437	101 779	47 333	6	3	3	11
Net value of construction† .....	2 342 871	3 332 003	1 904 216	1 227 146	1	1	1	3
Value added†† .....	1 421 363	2 038 342	1 097 580	688 870	2	1	1	2
Selected costs .....	1 687 609	2 278 119	1 348 946	947 367	2	1	2	3
Materials, components, and supplies <sup>3</sup> .....	934 337	1 276 934	835 823	570 549	2	1	1	3
Construction work subcontracted to others .....	688 011	904 021	462 738	376 818	4	1	3	2
Selected power, fuels, and lubricants .....	65 260	97 164	50 385	(NA)	2	2	2	(NA)
Electricity .....	8 539	9 925	6 360	(NA)	4	2	3	(NA)
Natural gas .....	3 299	4 223	3 384	(NA)	4	2	7	(NA)
Gasoline and diesel fuel .....	49 055	76 197	35 310	(NA)	2	2	2	(NA)
On highway use .....	32 376	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Off highway use .....	16 678	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
Other, including lubricating oils and greases .....	4 367	6 818	5 331	(NA)	7	4	4	(NA)
Rental cost for machinery, equipment, and buildings .....	62 781	64 361	30 995	(NA)	3	2	2	(NA)
For machinery and equipment .....	46 157	50 194	25 722	22 335	4	2	2	9
For buildings .....	16 624	14 167	5 273	(NA)	5	3	3	(NA)
Selected purchased services .....	62 633	84 195	51 843	(NA)	4	2	2	(NA)
Communication services .....	15 809	17 795	10 583	(NA)	5	2	3	(NA)
Repairs to buildings and other structures .....	2 720	4 596	2 275	(NA)	8	5	8	(NA)
Repairs to machinery and equipment .....	44 103	61 804	38 985	(NA)	4	2	2	(NA)
Ownership of construction projects:								
Value of construction work .....	3 030 883	4 236 025	2 366 954	1 603 964	2	1	1	2
Government owned .....	929 159	615 375	516 807	546 711	3	5	1	3
Federal .....	282 087	(NA)	(NA)	(NA)	5	(NA)	(NA)	(NA)
State and local .....	647 071	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)
Privately owned .....	2 101 723	3 620 649	1 850 147	1 057 253	3	1	1	3

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

<sup>2</sup>Data were collected separately for establishments classified in SIC 1531, Operative Builders and SIC 6552, Land Subdividers and Developers, Except Cemeteries. For all other industries, data are included in other business receipts.

<sup>3</sup>For 1972, includes data for power, fuels, and lubricants.

**Table 5. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	Relative standard error of estimate (percent)	
			1987	1982
<b>BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT</b>				
Beginning-of-year gross book value of depreciable assets -----	557 468	820 182	3	2
Capital expenditures, other than land -----	49 442	98 930	5	3
New -----	28 947	73 717	7	3
Used -----	20 495	25 212	7	4
Retirements and disposition of depreciable assets -----	39 541	52 248	15	2
End-of-year gross book value of depreciable assets -----	567 369	866 863	3	2
Depreciation charges during year -----	67 275	119 864	3	2
<b>Buildings and Other Structures, Additions, and Related Facilities</b>				
Beginning-of-year gross book value of depreciable assets -----	96 836	153 867	7	6
Capital expenditures, other than land -----	5 656	14 029	13	7
New buildings and other structures -----	3 708	10 771	19	8
Used buildings and other structures -----	1 948	3 258	11	22
Retirements and disposition of depreciable assets -----	*8 721	26 533	62	3
End-of-year gross book value of depreciable assets -----	93 771	141 364	5	7
Depreciation charges during year -----	7 157	13 090	7	4
<b>Machinery and Equipment</b>				
Beginning-of-year gross book value of depreciable assets -----	460 632	666 314	3	2
Capital expenditures, other than land -----	43 785	84 900	5	3
New machinery and equipment, including automobiles and trucks -----	25 239	62 945	7	3
New automobiles and trucks, intended primarily for highway use -----	12 634	26 163	8	4
Used machinery and equipment, including automobiles and trucks -----	18 546	21 954	7	4
Retirements and disposition of depreciable assets -----	30 819	25 715	7	3
End-of-year gross book value of depreciable assets -----	473 598	725 499	3	2
Depreciation charges during year -----	60 117	106 774	3	2

**Table 6. Value of Inventories for Establishments With Payroll: 1987 and 1986**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
<b>All establishments:</b>		
Number .....	5 204	1
Value of construction work .....	3 030 883	2
<b>Establishments with inventories:</b>		
Number .....	1 837	5
Value of construction work .....	1 355 002	4
<b>Inventories<sup>1</sup>:</b>		
End of 1987, materials and supplies .....	34 727	8
End of 1986, materials and supplies .....	36 199	8
<b>Establishments with no inventories:</b>		
Number .....	2 582	4
Value of construction work .....	1 218 175	3
<b>Establishments not reporting:</b>		
Number .....	785	9
Value of construction work .....	457 706	6

<sup>1</sup>Inventories at cost or market prior to any adjustment to correct to LIFO values.



**Table 7. Selected Statistics for Establishments With Payroll by Employment Size Class: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
<b>1987</b>											
Number of establishments .....	5 204	3 190	1 129	516	280	63	19	5	1	-	
All employees** .....	38 728	6 072	7 305	6 974	8 678	4 258	2 933	2 505	(D)	-	
Payroll, all employees .....	724 364	84 068	110 228	125 744	180 924	88 960	83 700	50 739	(D)	-	
Construction worker hours (thousands) .....	49 965	6 463	8 481	8 963	12 086	6 020	4 907	3 042	(D)	-	
Dollar value business done .....	3 129 840	499 945	465 495	530 557	773 758	438 592	281 078	140 413	(D)	-	
Value of construction work <sup>1</sup> .....	3 030 883	479 640	449 230	516 960	752 190	431 437	401 424	(D)	(D)	-	
Net value of construction work† .....	2 342 871	371 053	794 895	(D)	868 347	(D)	212 750	95 825	(D)	-	
Value added†† .....	1 421 363	191 038	232 612	263 688	338 629	157 484	164 030	73 880	(D)	-	
Cost of materials, components, supplies, and fuels .....	999 598	189 012	152 541	171 597	253 729	232 718	(D)	(D)	(D)	-	
Cost of construction work subcontracted to others .....	688 011	108 587	171 295	(D)	315 279	(D)	92 849	(D)	(D)	-	
Rental cost for machinery, equipment, and buildings .....	62 781	7 142	7 705	8 402	13 963	11 830	8 870	4 868	(D)	-	
Capital expenditures, other than land .....	49 442	7 990	7 983	7 494	11 926	4 696	7 601	1 750	(D)	-	
End-of-year gross book value of depreciable assets .....	567 369	101 122	98 461	95 919	135 496	40 735	95 635	(D)	(D)	-	
<b>1982</b>											
All employees** .....	63 606	8 102	9 640	11 953	13 618	8 043	4 758	2 910	4 582	(D)	
Value of construction work <sup>1</sup> .....	4 236 025	451 236	558 604	739 191	942 471	622 145	284 473	258 567	379 336	(D)	
Value added†† .....	2 038 342	222 966	266 145	358 819	443 738	300 509	144 378	100 783	201 003	(D)	
<b>1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)</b>											
All employees** .....	1	4	6	5	4	(W)	(W)	(W)	(D)	-	
Net value of construction work† .....	1	5	6	(D)	3	(D)	(W)	(W)	(D)	-	
Capital expenditures, other than land .....	5	15	16	20	7	12	(W)	(W)	(D)	-	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

**Table 8. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									\$10,000,000 or more
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	
<b>1987</b>											
Number of establishments -----	5 204	(S)	(S)	(S)	1 423	785	548	429	132	59	36
All employees** -----	38 728	(S)	(S)	(S)	5 185	4 493	5 609	6 950	4 774	4 000	4 882
Payroll, all employees -----	724 364	(S)	(S)	(S)	64 888	68 572	100 363	140 174	106 122	83 268	135 245
Construction worker hours (thousands) -----	49 965	(S)	(S)	(S)	5 857	5 589	7 010	9 334	6 134	6 006	7 394
Dollar value of business done -----	3 129 840	(S)	(S)	(S)	230 590	277 784	380 177	644 258	464 900	410 379	630 830
Value of construction work <sup>1</sup> -----	3 030 883	(S)	(S)	(S)	226 657	270 448	372 180	615 570	447 288	400 491	608 704
Net value of construction work† -----	2 342 871	(S)	(S)	(S)	210 158	229 418	321 705	492 429	348 799	278 789	379 160
Value added†† -----	1 421 363	(S)	(S)	(S)	130 097	132 947	196 795	292 406	212 717	152 855	252 633
Cost of materials, components, supplies, and fuels -----	999 598	(S)	(S)	(S)	82 657	101 953	130 853	220 843	150 595	<u>280 376</u>	(D)
Cost of construction work subcontracted to others -----	688 011	(S)	(S)	(S)	16 499	41 029	50 475	123 140	98 488	121 702	229 544
Rental cost for machinery, equipment, and buildings -----	62 781	(S)	(S)	(S)	3 970	6 446	5 914	9 962	8 106	10 900	16 450
Capital expenditures, other than land -----	49 442	(S)	(S)	(S)	5 100	5 708	4 659	12 322	4 953	4 993	10 089
End-of-year gross book value of depreciable assets -----	567 369	(S)	(S)	(S)	64 051	76 113	70 887	124 734	52 358	48 963	106 901
<b>1982</b>											
All employees** -----	63 606	1 093	973	2 345	7 435	7 668	9 592	11 089	7 481	5 475	10 453
Value of construction work <sup>1</sup> -----	4 236 025	10 567	21 460	71 467	291 187	352 616	544 463	758 485	607 499	585 618	992 681
Value added†† -----	2 038 342	5 905	11 656	40 259	157 626	186 978	282 091	368 743	295 982	245 211	443 889
<b>1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)</b>											
All employees** -----	1	(S)	(S)	(S)	6	7	6	5	3	2	(W)
Net value of construction work† -----	1	(S)	(S)	(S)	6	7	6	5	4	1	(W)
Capital expenditures, other than land -----	5	(S)	(S)	(S)	18	20	16	15	14	9	(W)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.



**Table 9. Value of Construction Work for Establishments With Payroll by Type of Construction: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work <sup>1</sup>				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction <sup>2</sup>	Maintenance and repair	A	B	C	D
	A	B	C	D	A	B	C	D
<b>1987</b>								
Value of construction work <sup>1</sup> .....	3 030 883	1 673 061	720 599	476 121	2	2	2	3
<b>Building construction</b> .....	1 897 477	1 121 006	489 938	276 567	3	4	3	4
Single-family houses .....	481 964	300 765	98 287	82 911	6	9	7	6
Single-family houses, detached .....	440 504	274 014	93 038	73 451	7	10	8	7
Single-family houses, attached .....	41 460	26 750	5 248	9 460	14	19	10	18
Apartment buildings with two or more apartments .....	61 098	33 151	14 572	13 373	17	30	16	10
Other residential buildings, including hotels and motels .....	39 789	19 900	10 547	9 342	7	7	15	12
Hotels and motels .....	13 552	5 483	3 828	4 240	5	5	12	11
Other residential buildings, excluding hotels and motels .....	26 237	14 416	6 718	5 101	10	9	23	20
Office buildings .....	254 407	126 744	86 992	40 671	4	4	6	7
Other commercial buildings such as stores, restaurants, and automobile service stations .....	292 522	185 163	60 579	46 779	5	5	7	11
Industrial buildings and warehouses .....	239 000	126 680	73 866	38 453	4	4	7	10
Industrial buildings .....	200 527	103 014	64 155	33 358	5	5	7	11
Warehouses .....	38 472	23 666	9 711	5 094	6	6	18	10
Religious buildings .....	45 455	27 742	11 298	6 414	5	6	11	11
Educational buildings .....	205 282	134 401	57 634	13 247	4	5	3	8
Hospitals and institutional buildings .....	167 261	109 212	46 184	11 865	18	20	17	7
Amusement, social, and recreational buildings .....	27 769	22 064	3 189	2 516	7	7	14	30
Other nonresidential buildings .....	72 964	35 184	26 790	10 996	8	6	13	25
Land development for buildings .....	(S)	(NA)	(NA)	(NA)	(S)	(NA)	(NA)	(NA)
<b>Nonbuilding construction</b> .....	982 271	552 055	230 661	199 554	2	2	4	3
Highways, streets, and related facilities .....	279 683	139 210	82 725	57 747	4	5	7	6
Bridges and elevated highways .....	73 897	51 359	15 074	7 463	6	8	3	16
Power and communication transmission lines, towers, and related facilities .....	46 387	31 830	7 234	7 323	9	10	10	26
Sewers, water mains, and related facilities .....	70 713	51 646	10 560	8 506	9	11	10	19
Sewers, sewer lines, and related facilities .....	35 024	25 328	4 514	5 181	13	16	21	23
Water mains and related facilities .....	35 688	26 317	6 045	3 325	9	11	3	32
Pipeline, other than sewer or water lines .....	149 112	85 094	54 680	9 337	3	2	2	18
Blast furnaces, petroleum refineries, and chemical complexes .....	94 825	39 734	8 457	46 633	4	5	8	5
Power plants .....	26 211	17 857	3 128	5 226	1	1	(W)	1
Sewage treatment and water treatment plants .....	32 691	16 172	12 986	3 531	12	7	26	34
Sewage treatment plants .....	15 729	6 904	7 910	914	18	7	34	19
Water treatment plants .....	16 961	9 268	5 076	*2 617	11	7	15	44
Oilfields .....	33 457	19 378	6 152	7 926	15	17	24	19
Earthmoving, nonbuilding .....	24 378	16 366	*3 288	*4 722	30	29	53	47
Other nonbuilding construction .....	150 917	83 409	26 377	41 140	11	15	15	13
<b>Construction work, n.s.k.</b> .....	151 135	(NA)	(NA)	(NA)	8	(NA)	(NA)	(NA)
<b>1982</b>								
Value of construction work <sup>1</sup> .....	4 236 025	3 483 092	(NA)	752 932	1	1	(NA)	2
<b>Building construction</b> .....	2 732 241	2 355 805	(NA)	376 436	1	1	(NA)	2
Single-family houses .....	742 400	613 104	(NA)	129 295	3	3	(NA)	4
Single-family houses, detached .....	653 973	538 177	(NA)	115 795	3	4	(NA)	4
Single-family houses, attached .....	88 426	74 926	(NA)	13 500	6	7	(NA)	10
Apartment buildings with two or more apartments .....	144 944	129 050	(NA)	15 894	5	5	(NA)	9
Other residential buildings, including hotels and motels .....	42 844	36 455	(NA)	6 389	7	8	(NA)	7
Office buildings .....	615 913	546 638	(NA)	69 274	1	1	(NA)	3
Other commercial buildings such as stores, restaurants, and automobile service stations .....	245 895	208 237	(NA)	37 658	4	4	(NA)	8
Industrial buildings and warehouses .....	421 826	359 052	(NA)	62 773	2	2	(NA)	5
Industrial buildings .....	323 683	270 345	(NA)	53 337	3	2	(NA)	6
Warehouses .....	98 143	88 707	(NA)	9 436	3	3	(NA)	7
Religious buildings .....	63 313	53 320	(NA)	9 992	4	4	(NA)	8
Educational buildings .....	163 741	144 539	(NA)	19 201	3	3	(NA)	5
Hospitals and institutional buildings .....	198 418	183 736	(NA)	14 681	2	2	(NA)	3
Farm buildings .....	24 782	21 241	(NA)	3 540	18	15	(NA)	13
Amusement, social, and recreational buildings .....	41 441	39 848	(NA)	1 593	5	5	(NA)	9
Other nonresidential buildings .....	26 724	20 585	(NA)	6 146	8	8	(NA)	14
<b>Nonbuilding construction</b> .....	1 079 375	776 645	(NA)	302 730	2	2	(NA)	3
Highways, streets, and related facilities .....	273 103	203 301	(NA)	69 802	4	4	(NA)	8
Bridges, tunnels, and elevated highways .....	31 942	27 130	(NA)	4 811	4	3	(NA)	15
Power and communication transmission lines, towers, and related facilities .....	72 684	63 010	(NA)	9 674	6	7	(NA)	10
Sewers, water mains, and related facilities .....	104 948	91 945	(NA)	13 002	5	5	(NA)	15
Sewers, sewer lines, and related facilities .....	48 543	43 568	(NA)	4 975	7	7	(NA)	11
Water mains and related facilities .....	56 405	48 377	(NA)	8 027	8	7	(NA)	25
Pipeline, other than sewer or water lines .....	146 108	115 370	(NA)	30 738	2	1	(NA)	5
Heavy industrial facilities .....	216 361	106 703	(NA)	109 658	1	2	(NA)	1
Sewage treatment and water treatment plants .....	36 448	33 445	(NA)	3 003	12	9	(NA)	15
Sewage treatment plants .....	17 497	15 407	(NA)	2 089	18	21	(NA)	14
Water treatment plants .....	18 951	18 038	(NA)	913	11	10	(NA)	35
Oilfields .....	108 284	67 141	(NA)	41 143	7	8	(NA)	11
Other nonbuilding construction .....	89 497	68 600	(NA)	20 899	7	8	(NA)	8
<b>Construction work, n.s.k.</b> .....	424 407	350 642	(NA)	73 765	3	3	(NA)	4

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

<sup>2</sup>In 1982, data for additions, alterations, or reconstruction were not collected separately. These data are included with "New construction".



**Table 10. Quarterly Construction Worker Hours and Employment With Payroll by Industry:**

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Number of establishments	Average number of construction workers	Construction worker hours (thousands)	January to March		April to June	
					Construction workers <sup>1</sup>	Hours worked (thousands)	Construction workers <sup>1</sup>	Hours worked (thousands)
		A	B	C	D	E	F	G
	<b>Construction Industries and land subdividers and developers -----</b>	<b>5 204</b>	<b>30 393</b>	<b>49 965</b>	<b>28 590</b>	<b>11 123</b>	<b>31 446</b>	<b>13 009</b>
15, 16, 17	<b>Construction Industries:</b>							
15	<b>Building construction—General contractors and operative builders:</b>							
152	General contractors, residential buildings:							
1521	Single-family houses -----	529	1 056	1 317	998	312	1 029	336
1522	Other residential buildings -----	42	179	*200	158	32	182	*52
1531	Operative builders -----	124	*403	*574	(D)	*162	(D)	*148
154	General contractors, nonresidential buildings:							
1541	Industrial buildings and warehouses -----	53	476	939	440	206	449	228
1542	Nonresidential buildings, n.e.c. -----	323	3 390	5 106	3 312	1 153	3 524	1 389
16	<b>Heavy construction other than building construction—contractors:</b>							
1611	Highway and street construction -----	147	2 581	4 910	2 102	918	2 624	1 311
162	Heavy construction, except highway:							
1622	Bridge, tunnel, and elevated highway construction -----	31	572	963	539	205	598	251
1623	Water, sewer, and utility lines -----	212	2 595	4 871	2 031	903	2 822	1 284
1629	Heavy construction, n.e.c. -----	330	3 102	5 125	2 838	1 101	3 212	1 324
17	<b>Special trade contractors:</b>							
1711	Plumbing, heating, and air-conditioning ----	890	3 691	6 479	3 755	1 595	4 187	1 738
1721	Painting and paper hanging -----	253	876	1 213	743	254	913	300
1731	Electrical work -----	593	3 070	5 396	3 064	1 366	3 123	1 367
174	Masonry, stonework, tile setting, and plastering:							
1741	Masonry, stone setting, and other stonework -----	123	471	681	465	155	492	190
1742	Plastering, drywall, and insulation work --	160	1 171	1 879	1 040	379	1 031	404
1743	Terrazzo, tile, marble, and mosaic work --	29	119	135	122	34	132	33
175	Carpentry and floor work:							
1751	Carpentry -----	222	699	1 022	746	260	714	262
1752	Floor laying and other floor work -----	41	167	258	147	46	174	67
1761	Roofing, siding, and sheet metal work -----	248	1 718	2 525	1 772	555	1 756	668
1771	Concrete work -----	188	1 050	1 375	1 002	335	1 115	353
1781	Water well drilling -----	27	83	164	95	43	81	39
179	Miscellaneous special trade contractors:							
1791	Structural steel erection -----	60	542	908	562	202	507	222
1793	Glass and glazing work -----	68	236	555	232	117	257	163
1794	Excavation work -----	104	480	796	491	176	464	209
1795	Wrecking and demolition work -----	*26	100	147	93	40	80	33
1796	Installing building equipment, n.e.c. -----	29	217	382	233	99	202	90
1799	Special trade contractors, n.e.c. -----	263	1 287	1 931	1 113	440	1 317	517
6552	<b>Land subdividers and developers, n.e.c. --</b>	<b>77</b>	<b>(S)</b>	<b>(S)</b>	<b>(D)</b>	<b>(S)</b>	<b>(D)</b>	<b>(S)</b>

<sup>1</sup>Construction workers during pay periods including 12th of March, May, August, and November.

July to September		October to December		Relative standard error of estimate (percent) for column—										1987 SIC code
Construction workers¹	Hours worked (thousands)	Construction workers¹	Hours worked (thousands)											
H	I	J	K	B	C	D	E	F	G	H	I	J	K	
31 848	13 440	29 690	12 391	2	2	2	2	2	2	2	2	2	2	15, 16, 17
														15
1 169 210	340 *68	1 028 166	327 *47	10 20	13 43	10 33	14 39	10 28	13 48	13 15	16 55	13 15	15 53	152 1521 1522
*390	*137	*370	*125	60	42	(D)	42	(D)	43	63	43	66	43	1531 154
533 3 568	261 1 343	485 3 155	242 1 219	13 4	15 5	16 4	19 5	14 4	17 5	10 4	14 5	13 5	13 6	1541 1542
														16
2 870	1 418	2 726	1 261	5	5	5	5	5	5	5	5	5	5	1611
618 2 999 3 058	273 1 538 1 246	533 2 531 3 299	232 1 144 1 453	4 4 5	5 5 7	3 7 6	5 8 8	7 4 6	5 5 7	4 4 6	6 4 7	3 4 6	6 5 8	162 1622 1623 1629
														17
3 646	1 647	3 174	1 498	3	5	3	5	3	5	4	5	4	6	1711
987	352	861	306	12	13	13	15	12	14	13	15	14	14	1721
3 213	1 372	2 878	1 290	4	5	4	5	4	5	5	5	5	6	1731
														174
460 1 112 109	196 463 32	467 1 502 111	139 631 36	18 8 21	15 9 21	19 8 22	13 9 20	16 8 26	17 7 21	22 11 18	22 15 19	24 7 20	20 9 25	1741 1742 1743
689 201	255 82	646 149	243 62	9 28	14 27	10 24	13 16	10 28	14 25	9 31	13 34	9 28	16 29	175 1751 1752
1 757	708	1 588	593	7	10	7	9	8	10	8	11	8	10	1761
1 090	386	992	298	11	16	12	17	13	17	11	16	13	17	1771
85	42	73	38	26	31	29	29	26	35	25	31	23	32	1781
550 230 465 114 235 1 413	248 153 196 32 101 508	547 224 501 113 198 1 307	234 121 213 41 91 464	13 7 17 22 6 9	15 16 28 13 3 14	15 12 18 18 9 10	15 13 29 11 11 16	12 9 17 23 4 9	15 20 28 17 2 15	16 8 16 23 6 8	18 18 29 7 2 13	13 12 17 26 4 9	15 22 29 19 2 14	179 1791 1793 1794 1795 1796 1799
(S)	(S)	(S)	(S)	(S)	(S)	(D)	(S)	(D)	(S)	(S)	(S)	(S)	(S)	6552



**Table 11. Selected Industry Ratios for Establishments With Payroll in This State: 1987**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Average number of employees** per estab- lishment	Payroll per employee (\$1,000)	Construction worker hours per construction worker	Value of construction work per construction worker (\$1,000)	Average per dollar of value of construction work			
						Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Rental cost for machinery, equipment, and buildings
	<b>Construction industries and land subdividers and developers</b> .....	7.4	18.7	1 644.0	99.7	.239	.330	.227	.021
15, 16, 17	<b>Construction Industries:</b>								
15	<b>Building construction—General contractors and operative builders:</b>								
152	General contractors, residential buildings:								
1521	Single-family houses .....	3.2	14.8	1 247.2	163.9	.145	.366	.351	.014
1522	Other residential buildings .....	6.0	14.0	*1 117.3	157.6	.124	.143	.538	.008
1531	Operative builders .....	*5.2	*16.8	*1 424.3	*268.7	.100	.403	.416	.007
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses .....	11.2	23.0	1 972.7	120.3	.238	.311	.358	.010
1542	Nonresidential buildings, n.e.c. ....	13.8	19.7	1 506.2	188.8	.137	.224	.546	.008
16	<b>Heavy construction other than building construction—contractors:</b>								
1611	Highway and street construction .....	20.7	19.1	1 902.4	125.4	.180	.376	.162	.040
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction .....	20.9	19.3	1 683.6	108.5	.201	(D)	.100	.013
1623	Water, sewer, and utility lines .....	14.6	26.6	1 877.1	86.6	.366	.198	.079	.051
1629	Heavy construction, n.e.c. ....	11.5	16.3	1 652.2	65.7	.304	.423	.154	.042
17	<b>Special trade contractors:</b>								
1711	Plumbing, heating, and air-conditioning .....	5.5	18.8	1 755.4	96.9	.256	.400	.098	.015
1721	Painting and paper hanging .....	3.9	16.8	1 384.7	50.0	.382	.225	.043	.012
1731	Electrical work .....	6.8	19.8	1 757.7	75.4	.343	.402	.048	.015
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework .....	4.2	14.5	1 445.9	41.0	.388	.357	.014	.004
1742	Plastering, drywall, and insulation work .....	8.7	19.0	1 604.6	63.5	.358	(D)	.103	.015
1743	Terrazzo, tile, marble, and mosaic work .....	5.2	20.1	1 134.5	76.5	.331	(D)	.007	.004
175	Carpentry and floor work:								
1751	Carpentry .....	3.8	14.1	1 462.1	64.1	.267	(D)	.139	.007
1752	Floor laying and other floor work .....	5.4	16.7	1 544.9	79.8	.279	.438	.096	.011
1761	Roofing, siding, and sheet metal work .....	8.8	17.0	1 469.7	71.7	.300	.413	.061	.015
1771	Concrete work .....	6.2	13.1	1 309.5	50.1	.290	.345	.059	.022
1781	Water well drilling .....	4.3	14.5	1 975.9	71.8	.281	(D)	.004	.037
179	Miscellaneous special trade contractors:								
1791	Structural steel erection .....	10.7	18.5	1 675.3	73.7	.298	.296	.056	.018
1793	Glass and glazing work .....	5.1	22.1	2 351.7	84.4	.387	.504	.011	.027
1794	Excavation work .....	5.6	16.1	1 658.3	57.1	.343	.183	.035	.026
1795	Wrecking and demolition work .....	*5.0	23.0	1 470.0	83.4	.361	.093	.009	.023
1796	Installing building equipment, n.e.c. ....	9.6	27.2	1 760.4	104.6	.335	.225	.006	.014
1799	Special trade contractors, n.e.c. ....	6.4	16.8	1 500.4	77.5	.287	.385	.085	.029
6552	<b>Land subdividers and developers, n.e.c.</b> .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)

**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>OKLAHOMA CITY, OK MSA</b>											
	Construction Industries and land subdividers and developers .....	1 695	12 758	237 507	1 168 733	850 591	479 744	395 946	318 142	17 105	2	2
15,16, 17	Construction industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses .....	162	609	9 656	56 800	34 574	20 131	15 758	22 226	121	16	20
1522	Other residential buildings .....	15	*60	683	*3 998	*1 883	*1 515	*371	*2 115	(D)	54	59
1531	Operative builders .....	74	253	5 730	64 292	35 175	10 158	26 617	29 117	318	27	20
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1542	Nonresidential buildings, n.e.c. ....	117	1 961	37 382	328 033	141 539	68 143	75 072	186 494	1 566	6	6
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction .....	49	1 185	24 619	144 529	122 396	80 586	49 636	22 133	5 353	6	6
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction .....	*15	155	2 645	17 056	14 668	6 693	(D)	2 388	(D)	5	7
1623	Water, sewer, and utility lines .....	49	500	9 354	35 293	32 588	19 691	13 026	2 705	1 247	10	13
1629	Heavy construction, n.e.c. ....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
17	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning .....	309	2 015	38 085	153 784	136 792	75 535	63 078	16 992	3 658	6	6
1721	Painting and paper hanging .....	80	322	4 739	13 750	12 691	9 907	3 018	*1 059	*374	13	18
1731	Electrical work .....	177	1 456	31 265	95 094	88 827	49 823	40 049	6 267	1 303	6	5
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework .....	32	319	5 522	13 780	13 575	8 131	5 467	205	*423	21	19
1742	Plastering, drywall, and insulation work .....	67	409	7 680	23 198	21 078	12 374	(D)	2 121	109	17	15
1743	Terrazzo, tile, marble, and mosaic work .....	*17	74	1 471	3 846	(D)	2 778	1 517	(D)	(D)	28	(D)
175	Carpentry and floor work:											
1751	Carpentry .....	87	314	4 156	14 713	12 427	9 385	(D)	2 286	106	15	6
1752	Floor laying and other floorwork .....	14	109	1 892	7 691	6 798	3 350	(D)	893	(D)	17	7
1761	Roofing, siding, and sheet metal work .....	96	1 013	18 589	63 031	58 699	32 846	27 156	4 331	879	9	8
1771	Concrete work .....	59	332	4 912	15 884	15 546	9 567	5 979	338	*198	17	19
1781	Water well drilling .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection .....	17	180	2 998	*11 343	*10 779	*8 446	(D)	*563	(D)	21	53
1793	Glass and glazing work .....	33	183	3 274	9 030	8 899	4 910	4 142	*131	(S)	8	16
1794	Excavation work .....	21	160	2 568	6 409	5 956	4 888	1 398	*453	368	31	22
1795	Wrecking and demolition work .....	3	44	1 325	3 758	(D)	3 600	260	(D)	(D)	(W)	(D)
1796	Installing building equipment, n.e.c. ....	9	94	2 634	8 591	(D)	6 658	1 891	(D)	28	(W)	(D)
1799	Special trade contractors, n.e.c. ....	81	443	7 534	31 272	27 459	14 474	14 730	3 813	*119	19	21
6552	Land subdividers and developers, n.e.c. ....	21	51	1 304	*6 872	(D)	(D)	(S)	(D)	(D)	27	(D)
	<b>TULSA, OK MSA</b>											
	Construction Industries and land subdividers and developers .....	1 383	12 846	268 659	984 977	794 444	513 910	310 889	190 533	15 474	2	2
15,16, 17	Construction industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1522	Other residential buildings .....	*12	*75	*1 607	*16 174	*7 363	*5 906	(D)	*8 811	(D)	60	60
1531	Operative builders .....	8	32	*1 342	11 424	7 309	1 617	*5 758	4 115	(D)	33	35
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses .....	29	226	4 954	23 041	16 503	9 075	7 428	6 538	(D)	20	18
1542	Nonresidential buildings, n.e.c. ....	65	995	21 491	150 151	66 028	38 208	28 287	84 123	*1 081	6	7



**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>TULSA, OK MSA—Con.</b>											
	<b>Construction industries and land subdividers and developers—Con.</b>											
15,16, 17 16	<b>Construction industries—Con.</b>											
	<b>Heavy construction other than building construction—contractors:</b>											
1611	Highway and street construction -----	31	479	8 764	52 894	43 850	23 048	20 817	9 044	533	11	8
162 1622	Heavy construction, except highway: Bridge, tunnel, and elevated highway construction-----	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines-----	54	1 437	54 039	135 559	123 820	106 083	19 329	11 739	4 634	2	1
1629	Heavy construction, n.e.c.-----	81	1 774	26 153	92 751	79 362	44 204	(D)	13 389	2 531	6	6
17	<b>Special trade contractors:</b>											
1711	Plumbing, heating, and air- conditioning-----	223	1 566	34 279	121 166	108 901	65 252	45 357	12 265	779	5	4
1721	Painting and paper hanging-----	98	385	7 158	16 623	16 198	12 162	(D)	425	259	12	11
1731	Electrical work -----	183	1 387	28 182	79 332	76 101	46 180	30 558	3 231	925	7	5
174 1741	Masonry, stonework, tile setting, and plastering: Masonry, stone setting, and other stonework-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1742	Plastering, drywall, and insulation work-----	41	731	16 106	39 509	36 340	25 144	(D)	3 169	(D)	4	4
1743	Terrazzo, tile, marble, and mosaic work-----	8	71	1 501	5 045	(D)	*2 050	(D)	(D)	(S)	28	(D)
175 1751 1752	Carpentry and floor work: Carpentry----- Floor laying and other floorwork-----	72 *9	343 *11	5 609 90	18 118 *491	16 402 *400	10 497 *250	(D) 150	1 717 *91	(D) -	11 46	12 58
1761	Roofing, siding, and sheet metal work-----	66	592	10 389	36 603	34 551	18 832	16 753	*2 052	635	13	12
1771	Concrete work -----	47	429	5 567	20 259	18 594	12 405	6 272	1 665	*231	21	13
1781	Water well drilling -----	*11	*42	553	*2 958	(D)	*1 633	*1 314	(D)	(D)	54	(D)
179	<b>Miscellaneous special trade contractors:</b>											
1791	Structural steel erection-----	13	158	2 618	8 066	(D)	4 534	3 246	(D)	(D)	17	(D)
1793	Glass and glazing work-----	16	63	2 933	6 168	(D)	2 984	3 399	(D)	*32	20	(D)
1794	Excavation work-----	43	231	3 324	8 699	8 578	7 371	(D)	*121	(S)	30	26
1795	Wrecking and demolition work-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1796	Installing building equipment, n.e.c.-----	7	96	2 537	8 030	(D)	5 907	2 076	(D)	(D)	(W)	(D)
1799	Special trade contractors, n.e.c.-----	84	770	12 908	42 260	38 411	25 422	16 541	3 849	*1 750	10	13
6552	<b>Land subdividers and developers, n.e.c.-----</b>	25	245	4 056	6 218	(D)	3 250	*1 591	(D)	(S)	10	(D)

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## Texas

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# SUMMARY OF FINDINGS

This report provides results from the 1987 Census of Construction Industries for Texas. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property into lots, as defined in the 1987 Standard Industrial Classification (SIC) Manual. The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters. In addition, this census also includes one industry classified under "Real Estate" in the Manual, SIC 6552, Land Subdividers and Developers, Except Cemeteries.

During 1987, there were 146,954 establishments in this State operating in the construction industries or as land subdividers and developers. These establishments accounted for \$38.1 billion in total value of business done.

Most of the 146,954 construction establishments were small. Of the total, 114,917 were nonemployers, and over half of the employer establishments had less than 5 employees. The 13,388 construction establishments with 5 employees or more, while representing only 9 percent of all establishments, accounted for more than 75 percent of the total value of business done.

## ESTABLISHMENTS WITH PAYROLL

During 1987, the establishments with paid employees accounted for \$32.2 billion on total dollar value of business done. Of this amount, \$30.7 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$8.0 billion, leaving net value of construction work of \$22.7 billion. In addition, these establishments paid out \$10.9 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1987 was \$13.8 billion. (See Introduction and appendixes for explanation of terms.)

There were 32,037 establishments with total employment averaging 349,579 during the year. Total payroll for 1987 was \$7.1 billion. Total hours worked by construction workers during the year were 470 million hours.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

In 1987, the value of construction work was collected to better measure actual construction activity done during the year. Construction receipts, as reported in earlier censuses, may have included the value of work done before or after the calendar year and may have also excluded work done by builders for their own use. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.



## ESTABLISHMENTS WITHOUT PAYROLL

During 1987, there were 114,917 establishments with no payroll classified as construction or land subdividers and developers. According to administrative records of the Federal Government, their value of business done during 1987 was \$5.8 billion. Most of these establishments, about 76 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in tables 1 and 2 of this report.



Figure 1. **Selected Costs Per Dollar Value of Business Done**  
(Percent)

1987   
1982 

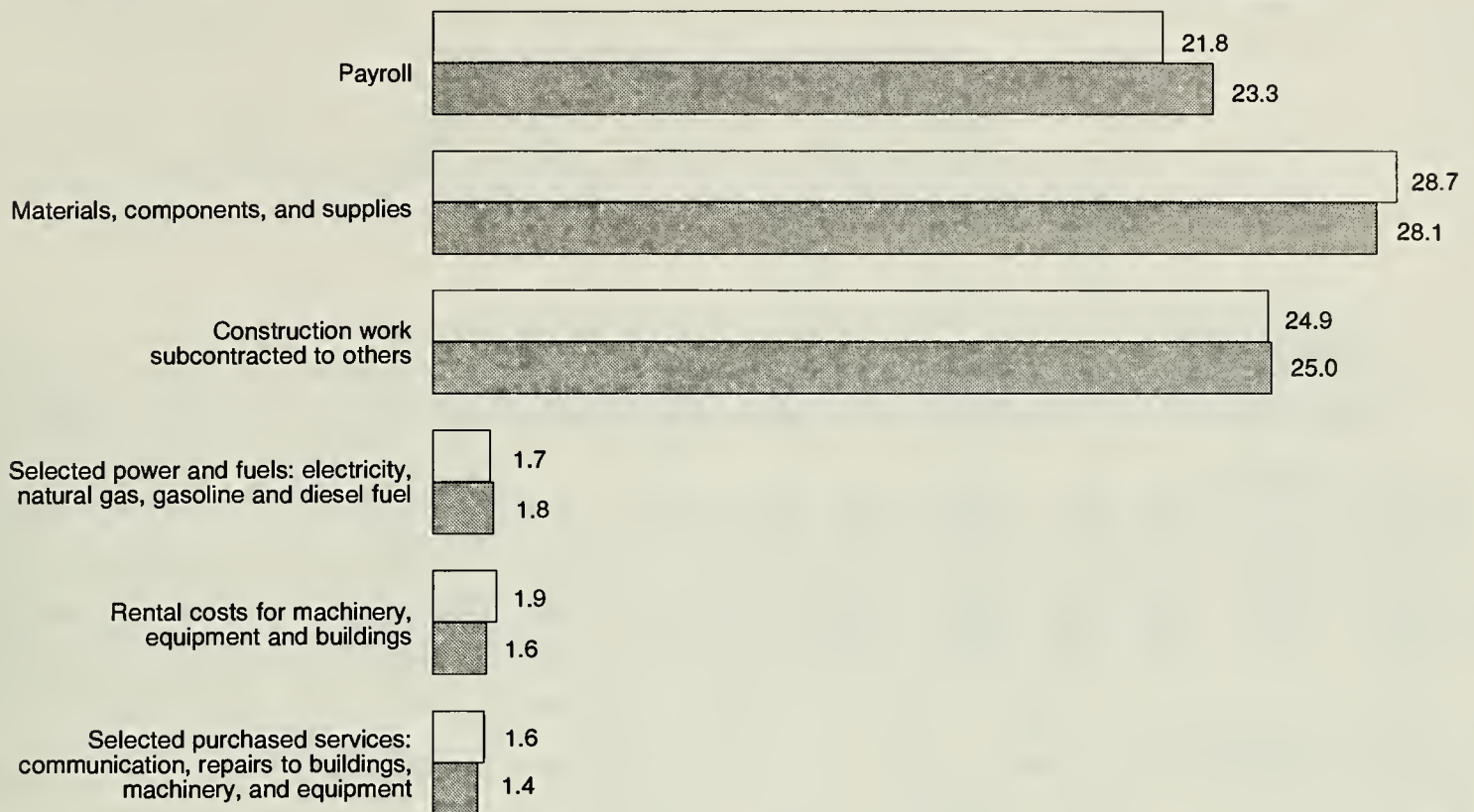
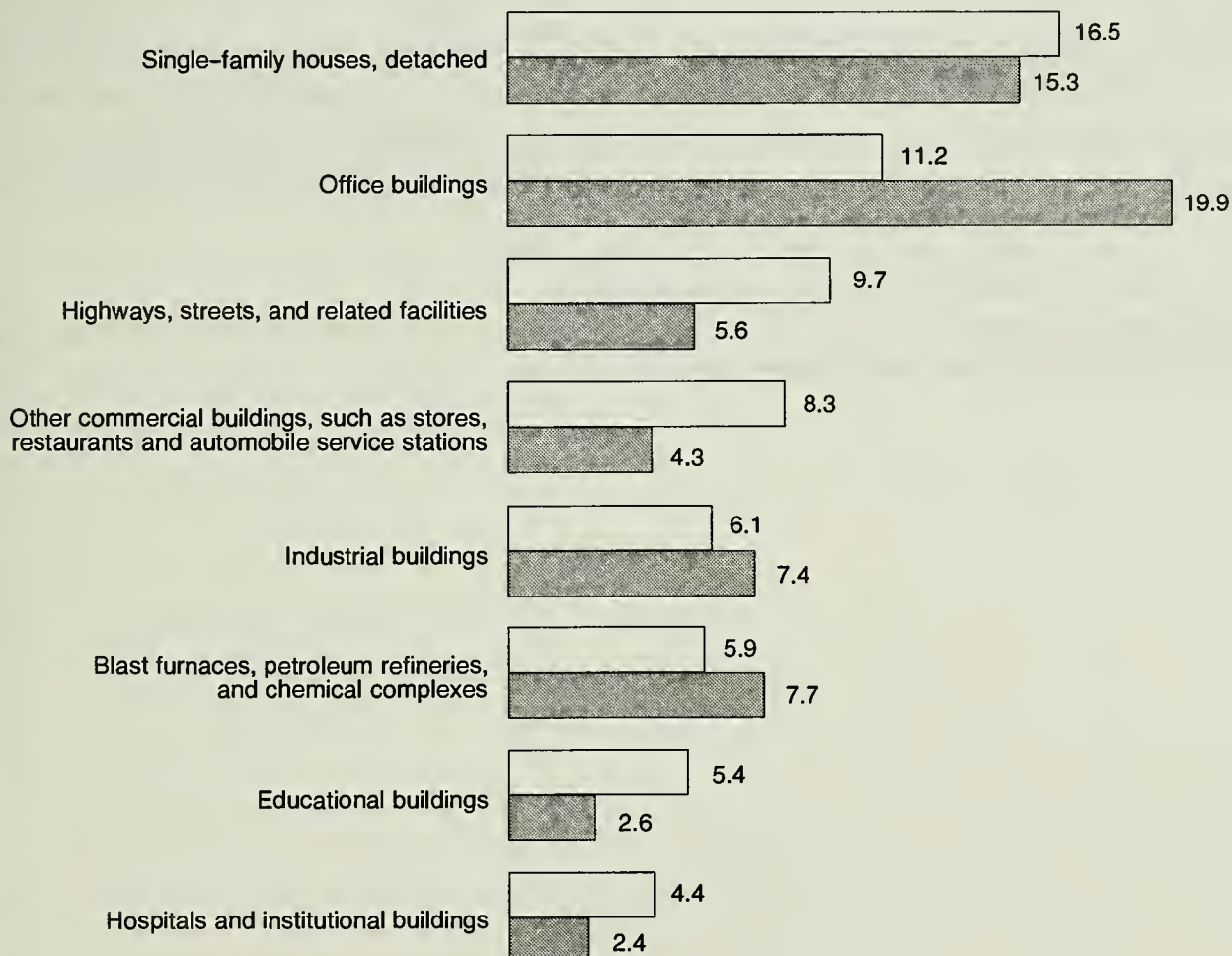


Figure 2. **Value of Construction Work by Type of Construction**  
(Percent)

1987   
1982 





**Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
			Proprie- tors and working partners	All em- ployees**	Dollar value of business done		Proprie- tors and working partners	Dollar value of business done		Proprie- tors and working partners	All em- ployees**	Dollar value of business done¹		
		A	B	C	D	E	F	G	H	I	J	K	J	K
15, 16, 17	1987													
	Construction Industries and land subdividers and developers -----	146 954	121 332	349 578	38 068 185	114 917	114 025	5 841 061	32 037	7 307	349 578	32 227 124	(W)	1
	Construction Industries -----	142 276	116 815	344 943	35 988 470	111 215	109 615	4 739 475	31 061	7 200	344 943	31 248 995	(W)	1
	Building construction—General contractors and operative builders ----	28 543	20 464	70 241	14 377 796	21 039	19 169	2 048 261	7 504	1 295	70 241	12 329 535	1	1
	Heavy construction other than building construction— contractors-----	5 818	3 086	100 434	8 249 637	2 563	2 524	135 368	3 255	562	100 434	8 114 269	1	1
	Special trade contractors -----	107 915	93 265	174 268	13 361 037	87 613	87 922	2 555 846	20 302	5 343	174 268	10 805 191	1	1
	Plumbing, heating, and air-conditioning --	14 175	10 937	36 415	3 076 238	9 656	9 670	345 312	4 519	1 267	36 415	2 730 926	1	1
	Electrical work-----	9 037	6 544	32 827	2 283 072	5 884	5 849	189 495	3 153	695	32 827	2 093 577	1	1
	Land subdividers and developers, n.e.c.²-----	4 670	(S)	(S)	(S)	3 702	4 410	1 101 586	968	(S)	(S)	(S)	(S)	(S)
	1982													
15, 16, 17	Construction Industries and land subdividers and developers -----	122 262	98 942	475 803	42 384 789	87 485	87 454	4 886 450	34 777	11 488	475 803	37 498 339	(W)	(W)
	Construction Industries -----	119 444	96 303	469 677	40 840 125	85 321	84 922	4 139 693	34 123	11 381	469 677	36 700 432	(W)	(W)
	Building construction—General contractors and operative builders ----	20 454	12 517	103 652	15 696 764	11 691	10 701	1 516 743	8 763	1 816	103 652	14 180 021	(W)	(W)
	Heavy construction other than building construction— contractors-----	4 563	2 550	127 316	9 486 525	1 952	1 972	187 002	2 611	578	127 316	9 299 523	(W)	(W)
	Special trade contractors -----	94 427	81 236	238 709	15 656 836	71 678	72 249	2 435 948	22 749	8 987	238 709	13 220 888	(W)	(W)
	Plumbing, heating, and air-conditioning --	11 258	8 471	46 817	3 475 604	6 739	6 770	298 089	4 519	1 701	46 817	3 177 515	1	1
	Electrical work-----	6 548	4 494	41 027	2 616 755	3 682	3 682	161 284	2 866	812	41 027	2 455 471	1	(W)
	Land subdividers and developers, n.e.c.²-----	2 812	2 635	6 120	1 544 655	2 164	2 532	746 757	648	103	6 120	797 898	2	2

Note: Number of establishments in this and subsequent tables represent those in business at any time during the year.

¹For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.

²For establishments without payroll, may also include data for an unknown number of cemetery subdividers and developers.

**Table 2. Summary Statistics by Size Class of Dollar Value of Business Done for Establishments With and Without Payroll : 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Receipts size	All establishments				Establishments without payroll <sup>1</sup>			Establishments with payroll				Relative standard error of estimate (percent) for column—	
	Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done	Number	Proprietors and working partners	All employees**	Dollar value of business done <sup>2</sup>		
	A	B	C	D	E	F	G	H	I	J	K	J	K
<b>1987</b>													
<b>The State</b> .....	146 954	121 332	349 578	38 068 185	114 917	114 025	5 841 061	32 037	7 307	349 578	32 227 124	(W)	1
\$10,000,000 or more .....	455	38	104 001	13 957 814	23	22	423 355	432	16	104 001	13 534 459	(W)	(W)
\$5,000,000 to \$9,999,999 .....	585	65	35 134	4 015 828	38	46	268 125	547	19	35 134	3 747 703	1	2
\$2,500,000 to \$4,999,999 .....	1 202	110	38 906	4 135 220	76	80	257 096	1 126	30	38 906	3 878 124	1	2
\$1,000,000 to \$2,499,999 .....	3 431	496	52 919	5 280 273	389	332	564 224	3 042	164	52 919	4 716 049	1	2
\$500,000 to \$999,999 .....	4 772	1 197	41 806	3 385 522	846	691	578 218	3 926	506	41 806	2 807 304	2	2
\$250,000 to \$499,999 .....	(S)	(S)	(S)	(S)	2 171	1 931	738 527	(S)	(S)	(S)	(S)	(S)	(S)
\$100,000 to \$249,999 .....	(S)	(S)	(S)	(S)	7 036	6 792	1 071 748	(S)	(S)	(S)	(S)	(S)	(S)
\$50,000 to \$99,999 .....	(S)	(S)	(S)	(S)	10 722	10 666	750 893	(S)	(S)	(S)	(S)	(S)	(S)
\$25,000 to \$49,999 .....	(S)	(S)	(S)	(S)	15 895	15 896	561 310	(S)	(S)	(S)	(S)	(S)	(S)
Less than \$25,000 .....	(S)	(S)	(S)	(S)	77 721	77 569	627 564	(S)	(S)	(S)	(S)	(S)	(S)
\$10,000 to \$24,999 .....	(NA)	(NA)	(NA)	(NA)	26 065	26 073	423 881	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999 .....	(NA)	(NA)	(NA)	(NA)	17 691	17 636	128 729	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,000 to \$4,999 .....	(NA)	(NA)	(NA)	(NA)	13 521	13 488	49 392	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,000 .....	(NA)	(NA)	(NA)	(NA)	20 444	20 372	25 561	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
<b>1982</b>													
<b>The State</b> .....	122 262	98 942	475 803	42 384 789	87 485	87 454	4 886 450	34 777	11 488	475 803	37 498 339	(W)	(W)
\$10,000,000 or more .....	521	36	156 956	18 904 608	21	12	546 655	500	24	156 956	18 357 953	(W)	(W)
\$5,000,000 to \$9,999,999 .....	613	57	45 816	4 210 257	34	38	229 855	579	19	45 816	3 980 402	(W)	(W)
\$2,500,000 to \$4,999,999 .....	1 243	127	53 084	4 294 244	84	86	281 698	1 159	41	53 084	4 012 546	(W)	(W)
\$1,000,000 to \$2,499,999 .....	3 270	587	68 404	5 031 506	354	341	518 338	2 916	246	68 404	4 513 168	1	1
\$500,000 to \$999,999 .....	4 739	1 381	50 702	3 294 353	691	589	472 631	4 048	792	50 702	2 821 722	2	2
\$250,000 to \$499,999 .....	6 876	2 921	40 316	2 431 072	1 573	1 384	540 712	5 303	1 537	40 316	1 890 360	2	2
\$100,000 to \$249,999 .....	13 664	8 576	36 940	2 172 412	5 222	5 072	797 307	8 442	3 504	36 940	1 375 105	3	2
\$50,000 to \$99,999 .....	13 548	10 905	13 678	960 505	8 231	8 346	568 751	5 317	2 559	13 678	391 754	3	3
\$25,000 to \$49,999 .....	16 202	14 716	5 841	571 167	13 151	13 315	458 459	3 051	1 401	5 841	112 708	4	3
Less than \$25,000 .....	(S)	(S)	(S)	(S)	58 124	58 271	472 044	(S)	(S)	(S)	(S)	(S)	(S)
\$10,000 to \$24,999 .....	(NA)	(NA)	(NA)	(NA)	20 701	20 807	327 312	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999 .....	(NA)	(NA)	(NA)	(NA)	14 076	14 109	95 428	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,500 to \$4,999 .....	(NA)	(NA)	(NA)	(NA)	13 705	13 717	39 662	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,500 .....	(NA)	(NA)	(NA)	(NA)	9 642	9 638	9 642	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Underscored data fields include data from adjoining lines which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>For establishments without payroll, may include data for an unknown number of cemetery subdividers and developers.

<sup>2</sup>For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.



**Table 3. General Statistics for Establishments With Payroll by Industry: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	1987							
		Number of establish- ments	Employees**		Payroll		Construction worker hours (thousands)	Value of construction work	Net value of construction work†
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
	<b>Construction industries and land subdividers and developers -----</b>	<b>32 037</b>	<b>349 578</b>	<b>275 293</b>	<b>7 025 641</b>	<b>5 038 201</b>	<b>470 189</b>	<b>30 712 341</b>	<b>22 700 377</b>
15, 16, 17	<b>Construction Industries:</b>								
15	<b>Building construction—General contractors and operative builders:</b>								
152	General contractors, residential buildings:								
1521	Single-family houses-----	3 614	13 373	9 139	197 930	120 565	13 507	1 408 821	988 478
1522	Other residential buildings-----	315	3 049	2 182	58 158	31 729	3 217	476 460	237 476
1531	Operative builders-----	971	8 519	2 898	234 970	55 591	5 086	3 020 431	1 767 607
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses-----	389	10 411	3 698	214 658	165 680	14 911	810 846	531 361
1542	Nonresidential buildings, n.e.c.-----	2 215	34 889	25 684	757 859	481 195	44 135	6 107 616	2 632 233
16	<b>Heavy construction other than building construction—contractors:</b>								
1611	Highway and street construction-----	757	31 776	27 741	617 490	505 520	46 456	3 069 721	2 542 047
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction-----	64	3 950	3 478	77 635	64 904	7 482	400 159	309 592
1623	Water, sewer, and utility lines-----	977	18 995	15 940	391 660	298 985	30 746	1 480 544	1 301 322
1629	Heavy construction, n.e.c.-----	1 457	45 713	38 209	1 107 271	892 672	69 658	2 753 256	2 310 182
17	<b>Special trade contractors:</b>								
1711	Plumbing, heating, and air-conditioning-----	4 519	36 415	27 533	763 968	534 786	49 414	2 687 530	2 429 027
1721	Painting and paper hanging-----	1 686	12 022	10 408	196 600	151 420	16 646	494 542	454 046
1731	Electrical work-----	3 153	32 827	25 648	690 544	514 730	45 758	2 065 300	1 997 290
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework-----	1 165	9 084	7 867	141 821	111 718	11 184	430 236	399 996
1742	Plastering, drywall, and insulation work-----	1 026	14 452	12 192	267 493	206 468	19 117	865 240	756 758
1743	Terrazzo, tile, marble, and mosaic work-----	346	2 241	1 817	38 521	28 178	2 773	124 339	117 200
175	Carpentry and floor work:								
1751	Carpentry-----	1 511	6 169	5 190	88 615	71 100	7 684	344 575	302 927
1752	Floor laying and other floor work-----	413	2 365	1 908	36 524	27 619	2 957	191 229	170 930
1761	Roofing, siding, and sheet metal work-----	1 432	13 306	10 682	211 534	150 022	17 282	693 455	650 142
1771	Concrete work-----	1 441	15 107	12 768	244 528	184 241	20 699	836 458	751 191
1781	Water well drilling-----	262	1 062	819	18 922	13 826	1 650	73 803	70 856
179	Miscellaneous special trade contractors:								
1791	Structural steel erection-----	299	4 916	4 223	103 258	80 428	7 267	305 417	286 301
1793	Glass and glazing work-----	364	3 234	2 362	65 764	45 902	4 025	202 590	198 494
1794	Excavation work-----	528	3 978	3 285	67 220	51 143	5 435	266 629	237 329
1795	Wrecking and demolition work-----	82	687	552	11 452	7 677	939	46 756	44 839
1796	Installing building equipment, n.e.c.-----	305	3 508	2 802	95 899	75 249	5 206	266 297	260 429
1799	Special trade contractors, n.e.c.-----	1 770	12 895	10 373	206 887	150 552	15 419	709 892	641 487
6552	<b>Land subdividers and developers, n.e.c.-----</b>	<b>968</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>

†In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

1987—Con.						1982			Relative standard error of estimate (percent) for column—			1987 SIC code
Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted to others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Total construction receipts¹	Value added††				
I	J	K	L	M	N	O	P	Q	B	H	M	
13 767 035	9 775 204	8 011 964	596 422	396 591	4 656 973	475 803	35 936 332	16 251 869	(W)	(W)	2	15, 16, 17
												15
503 828 126 529	523 654 113 787	420 343 238 983	16 860 3 677	12 945 1 933	169 050 19 750	24 586 5 388	1 750 058 771 526	659 519 128 981	3 7	4 4	10 11	152 1521 1522
936 402	878 605	1 252 823	15 275	30 646	278 733	14 649	2 678 070	906 951	3	3	4	1531
323 973 1 439 212	228 496 1 263 688	279 485 3 475 382	11 114 49 614	5 507 29 215	50 495 281 358	15 375 43 654	1 519 445 6 976 456	545 955 1 276 397	2 1	3 1	8 6	154 1541 1542
												16
1 404 933	1 201 547	527 674	94 566	75 436	832 885	20 287	1 589 203	691 705	1	1	3	1611
194 806 833 497 1 707 817	117 073 482 683 931 374	90 567 179 222 443 073	9 556 72 796 110 534	15 969 34 096 47 513	92 931 452 366 743 473	2 291 23 740 80 998	171 185 1 467 597 5 662 114	73 574 922 570 3 613 146	2 2 1	1 2 1	3 6 3	162 1622 1623 1629
												17
1 341 943	1 130 480	258 502	43 852	31 651	359 628	46 817	3 084 571	1 486 630	1	1	5	1711
340 316	116 483	40 495	11 884	8 492	60 970	15 447	549 532	392 742	3	3	11	1721
1 226 320	799 246	68 010	31 065	23 168	259 367	41 027	2 415 998	1 398 533	1	1	6	1731
256 004 435 449 69 729	147 347 337 290 48 904	30 240 108 481 7 139	10 277 10 711 1 546	3 810 5 742 800	53 779 102 057 13 485	11 162 23 381 2 813	346 693 1 181 641 133 929	220 860 691 333 75 045	4 4 6	3 2 7	17 8 23	174 1741 1742 1743
190 006 86 407	117 441 89 373	41 648 20 299	2 494 3 209	3 310 1 390	33 352 14 544	11 275 2 217	405 415 140 297	220 083 63 598	5 6	8 7	12 39	175 1751 1752
395 947	274 740	43 312	11 781	12 394	118 205	14 732	725 380	383 724	3	3	11	1761
428 244	334 352	85 267	34 422	11 790	165 374	18 577	888 771	450 936	3	3	8	1771
43 177	31 812	2 946	1 282	1 664	54 739	2 126	132 189	68 350	7	7	18	1781
232 634 108 834 169 881 38 992 197 318 424 871	65 279 101 254 76 738 7 026 65 734 240 565	19 116 4 096 29 300 1 917 5 867 68 405	10 833 3 272 10 857 1 557 3 563 14 749	2 842 944 11 280 *3 915 2 276 9 272	51 346 31 008 96 732 16 765 24 453 104 970	7 471 4 530 14 302 352 5 327 17 153	391 466 343 831 886 417 17 372 423 971 836 304	281 735 170 263 585 961 14 763 273 333 511 227	3 3 7 19 5 3	3 3 6 13 4 3	10 19 15 54 20 8	179 1791 1793 1794 1795 1796 1799
(S)	(S)	(S)	(S)	(S)	(S)	6 120	446 892	143 944	(S)	(S)	(S)	6552



**Table 4. Detailed Statistics for Establishments With Payroll: 1987 and Earlier Census Years**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	1977	1972	Relative standard error of estimate (percent)			
					1987	1982	1977	1972
Number of establishments in business during year .....	32 037	34 777	31 522	27 874	1	1	1	2
Proprietors and working partners .....	7 307	11 488	21 097	20 296	3	2	2	2
All employees** .....	349 578	475 803	408 403	310 343	(W)	(W)	(W)	1
Construction workers:								
March .....	273 576	395 566	328 115	251 814	(W)	(W)	(W)	1
May .....	274 761	392 824	344 857	257 015	(W)	(W)	1	1
August .....	283 834	398 724	354 398	277 355	1	1	1	2
November .....	269 001	373 187	344 202	261 032	1	(W)	1	2
Average .....	275 293	392 751	343 095	264 534	(W)	(W)	(W)	1
Other employees:								
March .....	76 332	81 812	62 587	44 939	1	1	1	1
May .....	74 134	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
August .....	74 004	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
November .....	72 683	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Average .....	74 288	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Construction worker hours (thousands):								
January to March .....	112 706	170 687	(NA)	(NA)	1	(W)	(NA)	(NA)
April to June .....	117 833	176 839	(NA)	(NA)	1	(W)	(NA)	(NA)
July to September .....	123 398	179 396	(NA)	(NA)	1	(W)	(NA)	(NA)
October to December .....	116 251	166 011	(NA)	(NA)	1	(W)	(NA)	(NA)
Total hours worked .....	470 189	692 936	(NA)	(NA)	1	(W)	(NA)	(NA)
Payroll, all employees .....	7 025 641	8 727 378	4 915 923	2 456 195	(W)	(W)	(W)	1
Payroll, construction workers .....	5 038 201	6 711 262	3 820 993	1 957 128	(W)	(W)	(W)	1
Payroll, other employees .....	1 987 440	2 016 116	1 094 930	499 067	1	(W)	(W)	1
First quarter payroll, all employees .....	1 712 865	2 076 017	1 091 592	(NA)	(W)	(W)	(W)	(NA)
Employer costs for fringe benefits, all employees .....	1 344 917	1 516 641	764 282	(NA)	(W)	(W)	(W)	(NA)
Legally required expenditures .....	1 025 764	1 151 545	530 999	(NA)	(W)	(W)	1	(NA)
Voluntary expenditures .....	319 152	365 095	233 284	(NA)	1	(W)	(W)	(NA)
Dollar value of business done .....	32 227 124	37 498 339	20 576 510	10 507 241	1	(W)	(W)	1
Value of construction work <sup>1</sup> .....	30 712 341	35 936 332	19 442 626	10 004 136	(W)	(W)	(W)	1
Value of construction work subcontracted in from others .....	6 416 630	7 419 140	3 813 710	1 809 825	1	1	1	2
Land receipts <sup>2</sup> .....	672 919	642 659	(NA)	(NA)	6	1	(NA)	(NA)
Other business receipts .....	841 862	919 347	1 133 884	503 105	1	1	1	4
Net value of construction† .....	22 700 377	26 550 034	15 278 524	7 567 010	(W)	(W)	(W)	1
Value added†† .....	13 767 035	16 251 869	9 580 999	4 210 009	1	(W)	(W)	1
Selected costs .....	17 787 168	20 603 810	10 662 254	6 036 522	1	(W)	1	1
Materials, components, and supplies <sup>3</sup> .....	9 241 252	10 553 062	6 190 548	3 599 396	1	(W)	1	1
Construction work subcontracted to others .....	8 011 964	9 386 297	4 164 102	2 437 126	1	(W)	1	2
Selected power, fuels, and lubricants .....	533 952	664 450	307 605	(NA)	1	(W)	1	(NA)
Electricity .....	82 504	96 299	37 590	(NA)	1	1	2	(NA)
Natural gas .....	15 329	24 315	15 901	(NA)	2	2	3	(NA)
Gasoline and diesel fuel .....	399 540	502 123	217 418	(NA)	1	1	1	(NA)
On highway use .....	268 252	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Off highway use .....	131 288	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Other, including lubricating oils and greases .....	36 578	41 711	36 705	(NA)	1	1	2	(NA)
Rental cost for machinery, equipment, and buildings .....	596 422	581 476	314 757	(NA)	1	1	1	(NA)
For machinery and equipment .....	425 527	469 051	269 189	162 648	2	1	1	3
For buildings .....	170 895	112 425	45 568	(NA)	2	1	1	(NA)
Selected purchased services .....	520 471	523 904	314 840	(NA)	1	1	2	(NA)
Communication services .....	140 475	123 262	80 089	(NA)	1	1	4	(NA)
Repairs to buildings and other structures .....	30 523	30 818	16 950	(NA)	2	2	2	(NA)
Repairs to machinery and equipment .....	349 471	369 823	217 801	(NA)	1	1	2	(NA)
Ownership of construction projects:								
Value of construction work .....	30 712 341	35 936 332	19 442 626	10 004 136	(W)	(W)	(W)	1
Government owned .....	7 827 000	4 488 499	2 922 710	2 692 180	1	2	1	1
Federal .....	1 660 951	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
State and local .....	6 166 048	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Privately owned .....	22 885 341	31 447 832	16 519 915	7 311 956	1	(W)	(W)	1

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

<sup>2</sup>Data were collected separately for establishments classified in SIC 1531, Operative Builders and SIC 6552, Land Subdividers and Developers, Except Cemeteries. For all other industries, data are included in other business receipts.

<sup>3</sup>For 1972, includes data for power, fuels, and lubricants.

**Table 5. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	Relative standard error of estimate (percent)	
			1987	1982
<b>BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT</b>				
Beginning-of-year gross book value of depreciable assets -----	4 810 386	5 485 891	1	1
Capital expenditures, other than land -----	396 591	627 019	2	1
New -----	267 918	490 356	2	1
Used -----	128 672	136 662	2	1
Retirements and disposition of depreciable assets -----	550 004	331 205	6	2
End-of-year gross book value of depreciable assets -----	4 656 973	5 781 704	1	1
Depreciation charges during year -----	556 130	754 438	1	1
<b>Buildings and Other Structures, Additions, and Related Facilities</b>				
Beginning-of-year gross book value of depreciable assets -----	1 126 148	1 201 763	2	1
Capital expenditures, other than land -----	84 880	97 885	3	2
New buildings and other structures -----	56 355	81 359	3	2
Used buildings and other structures -----	28 524	16 526	7	4
Retirements and disposition of depreciable assets -----	66 830	125 161	5	2
End-of-year gross book value of depreciable assets -----	1 144 198	1 174 487	2	1
Depreciation charges during year -----	120 742	98 809	2	1
<b>Machinery and Equipment</b>				
Beginning-of-year gross book value of depreciable assets -----	3 684 238	4 284 128	1	1
Capital expenditures, other than land -----	311 710	529 133	2	1
New machinery and equipment, including automobiles and trucks -----	211 563	408 997	2	1
New automobiles and trucks, intended primarily for highway use -----	88 875	157 711	3	2
Used machinery and equipment, including automobiles and trucks -----	100 147	120 136	2	2
Retirements and disposition of depreciable assets -----	483 174	206 044	6	3
End-of-year gross book value of depreciable assets -----	3 512 774	4 607 216	1	1
Depreciation charges during year -----	435 387	655 628	2	1

**Table 6. Value of Inventories for Establishments With Payroll: 1987 and 1986**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number .....	32 037	1
Value of construction work .....	30 712 341	(W)
Establishments with inventories:		
Number .....	12 267	2
Value of construction work .....	14 254 405	1
Inventories <sup>1</sup> :		
End of 1987, materials and supplies .....	357 408	5
End of 1986, materials and supplies .....	381 998	3
Establishments with no inventories:		
Number .....	15 226	2
Value of construction work .....	11 616 912	1
Establishments not reporting:		
Number .....	4 544	3
Value of construction work .....	4 841 024	2

<sup>1</sup>Inventories at cost or market prior to any adjustment to correct to LIFO values.



**Table 7. Selected Statistics for Establishments With Payroll by Employment Size Class: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
<b>1987</b>										
Number of establishments -----	32 037	(S)	5 395	3 634	2 357	631	277	62	23	9
All employees** -----	349 578	(S)	41 097	48 489	69 852	42 948	40 433	21 425	16 112	32 969
Payroll, all employees -----	7 025 641	(S)	656 654	893 470	1 391 408	939 348	926 720	510 967	348 211	825 723
Construction worker hours (thousands) -----	470 189	(S)	45 523	63 565	95 129	64 073	61 516	33 630	22 776	44 651
Dollar value business done -----	32 227 124	(S)	3 315 249	3 716 910	5 799 332	4 451 641	4 277 089	2 390 676	2 632 501	1 928 093
Value of construction work <sup>1</sup> -----	30 712 341	(S)	3 076 060	3 567 511	5 636 036	4 347 069	4 105 922	2 340 155	2 525 147	1 633 335
Net value of construction work† -----	22 700 377	(S)	2 343 060	2 886 695	4 231 382	3 090 902	2 966 429	1 659 332	1 616 715	1 340 715
Value added†† -----	13 767 035	(S)	1 397 201	1 750 351	2 585 174	1 784 674	1 777 361	1 026 097	955 332	1 052 300
Cost of materials, components, supplies, and fuels -----	9 775 204	(S)	997 200	1 222 353	1 740 285	1 375 384	1 295 793	1 347 054	(D)	583 173
Cost of construction work subcontracted to others -----	8 011 964	(S)	732 999	680 816	1 404 654	1 256 166	1 139 492	680 823	908 432	292 620
Rental cost for machinery, equipment, and buildings -----	596 422	(S)	57 484	70 546	104 487	89 273	79 973	62 039	27 904	60 379
Capital expenditures, other than land -----	396 591	(S)	36 646	55 461	77 414	62 531	67 294	21 066	34 288	5 200
End-of-year gross book value of depreciable assets -----	4 656 973	(S)	511 250	651 681	886 632	585 277	627 805	283 243	520 056	(D)
<b>1982</b>										
All employees** -----	475 803	38 031	47 026	61 685	91 166	58 802	60 403	34 342	25 193	59 154
Value of construction work <sup>1</sup> -----	35 936 332	2 337 592	2 580 797	3 699 530	6 295 591	5 128 586	5 154 250	3 346 983	2 639 079	4 753 923
Value added†† -----	16 251 869	1 039 170	1 198 717	1 735 584	2 892 020	2 146 147	2 236 242	1 331 742	1 093 862	2 578 383
<b>1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)</b>										
All employees** -----	(W)	(S)	2	2	1	1	1	(W)	(W)	(W)
Net value of construction work† -----	(W)	(S)	3	2	1	(W)	(W)	(W)	(W)	(W)
Capital expenditures, other than land -----	2	(S)	8	7	3	3	(W)	(W)	(W)	(W)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

**Table 8. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
<b>1987</b>											
Number of establishments -----	32 037	(S)	(S)	(S)	(S)	(S)	3 926	3 042	1 126	547	432
All employees** -----	349 578	(S)	(S)	(S)	(S)	(S)	41 806	52 919	38 906	35 134	104 001
Payroll, all employees -----	7 025 641	(S)	(S)	(S)	(S)	(S)	738 591	1 069 035	864 779	810 667	2 570 463
Construction worker hours (thousands) -----	470 189	(S)	(S)	(S)	(S)	(S)	53 455	70 579	56 219	52 035	151 054
Dollar value of business done -----	32 227 124	(S)	(S)	(S)	(S)	(S)	2 807 304	4 716 049	3 878 124	3 747 703	13 534 459
Value of construction work <sup>1</sup> -----	30 712 341	(S)	(S)	(S)	(S)	(S)	2 714 952	4 522 501	3 690 868	3 590 042	12 755 015
Net value of construction work† -----	22 700 377	(S)	(S)	(S)	(S)	(S)	2 217 346	3 562 846	2 835 365	2 648 338	8 373 130
Value added†† -----	13 767 035	(S)	(S)	(S)	(S)	(S)	1 327 956	2 109 756	1 730 700	1 571 368	5 110 717
Cost of materials, components, supplies, and fuels -----	9 775 204	(S)	(S)	(S)	(S)	(S)	947 460	1 558 509	1 200 933	1 134 765	3 727 346
Cost of construction work subcontracted to others -----	8 011 964	(S)	(S)	(S)	(S)	(S)	497 606	959 654	855 502	941 704	4 381 885
Rental cost for machinery, equipment, and buildings -----	596 422	(S)	(S)	(S)	(S)	(S)	47 633	88 895	76 920	78 124	240 652
Capital expenditures, other than land -----	396 591	(S)	(S)	(S)	(S)	(S)	38 948	63 929	45 774	49 739	139 495
End-of-year gross book value of depreciable assets -----	4 656 973	(S)	(S)	(S)	(S)	(S)	547 273	778 925	622 080	412 621	1 505 093
<b>1982</b>											
All employees** -----	475 803	(S)	5 841	13 678	36 940	40 316	50 702	68 404	53 084	45 816	156 956
Value of construction work <sup>1</sup> -----	35 936 332	(S)	110 258	384 241	1 342 201	1 829 663	2 737 967	4 344 656	3 879 352	3 853 094	17 413 689
Value added†† -----	16 251 869	(S)	60 675	217 185	721 424	919 670	1 369 364	2 103 861	1 871 251	1 765 740	7 200 426
<b>1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)</b>											
All employees** -----	(W)	(S)	(S)	(S)	(S)	(S)	2	1	1	1	(W)
Net value of construction work† -----	(W)	(S)	(S)	(S)	(S)	(S)	2	2	2	1	(W)
Capital expenditures, other than land -----	2	(S)	(S)	(S)	(S)	(S)	8	6	4	4	(W)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.



**Table 9. Value of Construction Work for Establishments With Payroll by Type of Construction: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work <sup>1</sup>				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction <sup>2</sup>	Maintenance and repair	A	B	C	D
	A	B	C	D	A	B	C	D
<b>1987</b>								
Value of construction work <sup>1</sup> .....	30 712 341	19 785 245	5 370 352	3 564 781	(W)	1	1	1
<b>Building construction</b> .....	19 633 999	13 536 300	3 820 025	2 021 320	1	1	1	2
Single-family houses .....	5 456 226	4 062 358	833 944	559 924	2	2	3	3
Single-family houses, detached .....	5 055 687	3 805 191	761 249	489 246	2	2	3	4
Single-family houses, attached .....	400 539	257 166	72 694	70 678	6	8	7	7
Apartment buildings with two or more apartments .....	1 035 794	841 658	99 946	94 188	4	5	7	5
Other residential buildings, including hotels and motels .....	492 293	325 415	93 974	72 902	3	3	5	7
Hotels and motels .....	283 412	206 905	37 643	38 863	3	4	6	5
Other residential buildings, excluding hotels and motels .....	208 881	118 510	56 331	34 039	5	4	8	13
Office buildings .....	3 443 079	2 292 477	814 020	336 581	1	1	2	2
Other commercial buildings such as stores, restaurants, and automobile service stations .....	2 538 015	1 695 386	589 011	253 617	2	2	3	3
Industrial buildings and warehouses .....	2 396 293	1 534 953	418 391	442 948	1	2	2	2
Industrial buildings .....	1 867 358	1 120 794	344 149	402 415	1	2	2	2
Warehouses .....	528 934	414 159	74 242	40 533	3	3	5	4
Religious buildings .....	387 297	262 004	90 052	35 240	3	3	5	5
Educational buildings .....	1 644 642	1 137 663	426 001	80 977	2	2	4	7
Hospitals and institutional buildings .....	1 337 573	914 612	340 523	82 436	1	2	3	3
Amusement, social, and recreational buildings .....	294 681	250 072	30 109	14 499	2	2	3	6
Other nonresidential buildings .....	351 751	219 702	84 054	48 008	5	4	13	14
Land development for buildings .....	256 355	(NA)	(NA)	(NA)	8	(NA)	(NA)	(NA)
<b>Nonbuilding construction</b> .....	9 342 733	6 248 945	1 550 327	1 543 461	1	1	1	1
Highways, streets, and related facilities .....	2 993 346	2 011 261	702 384	279 700	1	1	2	3
Outdoor swimming pools .....	158 255	139 473	6 346	12 434	11	12	17	15
Bridges and elevated highways .....	360 921	307 360	42 024	11 537	2	1	10	4
Dam and reservoir construction .....	167 235	153 146	5 486	8 603	2	2	6	10
Power and communication transmission lines, towers, and related facilities .....	395 723	268 242	69 480	58 001	3	3	6	4
Sewers, water mains, and related facilities .....	1 061 273	869 442	108 599	83 231	2	3	4	5
Sewers, sewer lines, and related facilities .....	571 775	462 315	59 933	49 526	3	3	5	6
Water mains and related facilities .....	489 497	407 126	48 666	33 704	3	3	4	8
Pipeline, other than sewer or water lines .....	284 897	163 310	57 672	63 914	2	2	5	5
Blast furnaces, petroleum refineries, and chemical complexes .....	1 807 209	951 356	224 947	630 905	1	2	1	1
Power plants .....	509 203	351 137	30 725	127 339	(W)	(W)	4	1
Sewage treatment and water treatment plants .....	421 660	286 808	111 497	23 354	4	5	3	8
Sewage treatment plants .....	267 320	163 087	90 354	13 878	6	9	3	5
Water treatment plants .....	154 339	123 720	21 143	9 476	3	2	7	15
Oilfields .....	159 265	82 885	21 852	54 527	5	6	7	6
Other nonbuilding construction .....	1 023 746	664 525	169 315	189 916	7	8	19	7
<b>Construction work, n.s.k.</b> .....	1 735 609	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
<b>1982</b>								
Value of construction work <sup>1</sup> .....	35 936 332	31 190 836	(NA)	4 745 495	(W)	(W)	(NA)	1
<b>Building construction</b> .....	23 393 161	20 731 066	(NA)	2 662 095	(W)	(W)	(NA)	1
Single-family houses .....	6 425 825	5 652 326	(NA)	773 498	1	1	(NA)	2
Single-family houses, detached .....	5 503 093	4 809 600	(NA)	693 493	1	1	(NA)	2
Single-family houses, attached .....	922 732	842 726	(NA)	80 005	2	2	(NA)	4
Apartment buildings with two or more apartments .....	1 412 976	1 270 764	(NA)	142 212	1	2	(NA)	4
Other residential buildings, including hotels and motels .....	655 899	592 147	(NA)	63 751	1	1	(NA)	3
Office buildings .....	7 147 698	6 647 694	(NA)	500 004	(W)	(W)	(NA)	1
Other commercial buildings such as stores, restaurants, and automobile service stations .....	1 562 935	1 305 351	(NA)	257 584	1	2	(NA)	2
Industrial buildings and warehouses .....	3 643 908	3 036 036	(NA)	607 872	1	1	(NA)	1
Industrial buildings .....	2 669 019	2 139 117	(NA)	529 902	1	1	(NA)	1
Warehouses .....	974 889	896 919	(NA)	77 970	1	1	(NA)	4
Religious buildings .....	296 118	244 279	(NA)	51 839	2	2	(NA)	3
Educational buildings .....	950 657	846 090	(NA)	104 566	1	1	(NA)	3
Hospitals and institutional buildings .....	872 656	785 399	(NA)	87 257	1	1	(NA)	2
Farm buildings .....	62 712	47 387	(NA)	15 325	9	7	(NA)	21
Amusement, social, and recreational buildings .....	176 538	156 378	(NA)	20 159	4	5	(NA)	5
Other nonresidential buildings .....	185 239	147 215	(NA)	38 028	3	4	(NA)	4
<b>Nonbuilding construction</b> .....	10 240 757	8 602 241	(NA)	1 638 516	(W)	(W)	(NA)	1
Highways, streets, and related facilities .....	2 013 503	1 638 937	(NA)	374 566	1	1	(NA)	2
Outdoor swimming pools .....	96 945	84 383	(NA)	12 561	8	8	(NA)	14
Bridges, tunnels, and elevated highways .....	276 790	254 220	(NA)	22 569	1	(W)	(NA)	6
Dam and reservoir construction .....	151 831	146 817	(NA)	5 014	2	2	(NA)	13
Marine construction .....	217 858	191 370	(NA)	26 487	(W)	(W)	(NA)	2
Conservation and development construction .....	126 745	112 860	(NA)	13 884	5	5	(NA)	10
Power and communication transmission lines, towers, and related facilities .....	419 655	331 339	(NA)	88 316	2	2	(NA)	3
Sewers, water mains, and related facilities .....	880 133	783 085	(NA)	97 047	1	1	(NA)	5
Sewers, sewer lines, and related facilities .....	526 376	488 482	(NA)	37 893	1	1	(NA)	5
Water mains and related facilities .....	353 756	294 602	(NA)	59 153	3	2	(NA)	8
Pipeline, other than sewer or water lines .....	766 286	663 886	(NA)	102 399	1	1	(NA)	3
Mass transit construction .....	101 126	76 467	(NA)	24 659	2	1	(NA)	4
Blast furnaces, petroleum refineries, and chemical complexes .....	2 762 140	2 188 982	(NA)	573 157	(W)	(W)	(NA)	1
Power plants .....	1 380 344	1 316 296	(NA)	64 047	(W)	(W)	(NA)	1
Sewage treatment and water treatment plants .....	273 884	245 528	(NA)	28 355	3	3	(NA)	7
Sewage treatment plants .....	168 647	154 758	(NA)	13 889	3	4	(NA)	5
Water treatment plants .....	105 236	90 769	(NA)	14 466	5	6	(NA)	12
Oilfields .....	330 522	205 848	(NA)	124 674	3	3	(NA)	4
Other nonbuilding construction .....	442 995	362 222	(NA)	80 780	4	3	(NA)	6
<b>Construction work, n.s.k.</b> .....	2 302 412	1 857 528	(NA)	444 883	1	1	(NA)	2

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

<sup>2</sup>In 1982, data for additions, alterations, or reconstruction were not collected separately. These data are included with "New construction".



**Table 10. Quarterly Construction Worker Hours and Employment With Payroll by Industry:**

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Number of establishments	Average number of construction workers	Construction worker hours (thousands)	January to March		April to June	
					Construction workers <sup>1</sup>	Hours worked (thousands)	Construction workers <sup>1</sup>	Hours worked (thousands)
		A	B	C	D	E	F	G
	<b>Construction industries and land subdividers and developers -----</b>	<b>32 037</b>	<b>275 293</b>	<b>470 189</b>	<b>273 576</b>	<b>112 706</b>	<b>274 781</b>	<b>117 833</b>
15, 16, 17	<b>Construction industries:</b>							
15	<b>Building construction—General contractors and operative builders:</b>							
152	General contractors, residential buildings:							
1521	Single-family houses -----	3 614	9 139	13 507	9 185	3 234	9 472	3 577
1522	Other residential buildings -----	315	2 182	3 217	2 332	802	2 264	852
1531	Operative builders -----	971	2 898	5 086	3 038	1 290	2 958	1 309
154	General contractors, nonresidential buildings:							
1541	Industrial buildings and warehouses -----	389	8 698	14 911	8 972	3 808	8 595	3 754
1542	Nonresidential buildings, n.e.c. -----	2 215	25 684	44 135	25 375	10 623	25 422	11 054
16	<b>Heavy construction other than building construction—contractors:</b>							
1611	Highway and street construction -----	757	27 741	46 456	26 523	10 800	27 778	11 809
162	Heavy construction, except highway:							
1622	Bridge, tunnel, and elevated highway construction -----	64	3 478	7 482	3 319	1 672	3 440	1 862
1623	Water, sewer, and utility lines -----	977	15 940	30 746	15 879	7 434	15 867	7 554
1629	Heavy construction, n.e.c. -----	1 457	38 209	69 658	37 928	16 480	36 983	16 718
17	<b>Special trade contractors:</b>							
1711	Plumbing, heating, and air-conditioning ----	4 519	27 533	49 414	27 029	11 481	27 528	12 471
1721	Painting and paper hanging -----	1 686	10 408	18 646	10 886	4 110	10 632	4 285
1731	Electrical work -----	3 153	25 648	45 758	25 296	11 025	25 160	11 277
174	Masonry, stonework, tile setting, and plastering:							
1741	Masonry, stone setting, and other stonework -----	1 165	7 867	11 184	7 877	2 731	7 866	2 822
1742	Plastering, drywall, and insulation work ..	1 026	12 192	19 117	12 301	4 922	11 731	4 643
1743	Terrazzo, tile, marble, and mosaic work ..	346	1 817	2 773	1 823	711	2 005	800
175	Carpentry and floor work:							
1751	Carpentry -----	1 511	5 190	7 684	5 709	1 955	5 315	1 959
1752	Floor laying and other floor work -----	413	1 908	2 957	1 879	714	1 855	713
1761	Roofing, siding, and sheet metal work -----	1 432	10 682	17 282	10 413	3 992	10 528	4 244
1771	Concrete work -----	1 441	12 768	20 899	12 733	5 006	13 482	5 391
1781	Water well drilling -----	262	819	1 650	799	380	844	427
179	Miscellaneous special trade contractors:							
1791	Structural steel erection -----	299	4 223	7 267	4 154	1 719	4 028	1 771
1793	Glass and glazing work -----	364	2 362	4 025	2 466	1 063	2 487	1 063
1794	Excavation work -----	528	3 285	5 435	3 346	1 280	3 240	1 335
1795	Wrecking and demolition work -----	82	552	939	522	211	551	218
1796	Installing building equipment, n.e.c. -----	305	2 802	5 206	2 881	1 250	2 832	1 335
1799	Special trade contractors, n.e.c. -----	1 770	10 373	15 419	9 999	3 595	10 967	4 174
6552	<b>Land subdividers and developers, n.e.c. --</b>	<b>968</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>

<sup>1</sup>Construction workers during pay periods including 12th of March, May, August, and November.

July to September		October to December		Relative standard error of estimate (percent) for column—										1987 SIC code
Construction workers¹	Hours worked (thousands)	Construction workers¹	Hours worked (thousands)											
H	I	J	K	B	C	D	E	F	G	H	I	J	K	
283 834	123 398	289 001	116 251	(W)	1	(W)	1	(W)	1	1	1	1	1	15, 16, 17
														15
9 284 2 353	3 534 863	8 615 1 784	3 160 699	4 8	5 9	4 10	5 10	4 10	5 11	4 8	5 9	4 6	5 7	152 1521 1522
2 939	1 285	2 657	1 200	4	6	4	6	4	6	5	6	4	6	1531
														154
8 394 27 088	3 623 11 642	8 830 24 849	3 726 10 814	2 1	3 2	2 2	3 2	2 2	3 2	2 1	3 2	2 2	3 2	1541 1542
														16
28 866	12 413	27 801	11 433	1	1	1	1	1	1	1	2	1	2	1611
														162 1622
3 631 16 679 37 825	2 042 8 258 17 592	3 527 15 337 40 102	1 904 7 498 18 867	1 2 1	4 2 1	2 2 1	4 2 1	1 2 1	4 3 1	1 2 1	4 2 1	1 2 1	4 2 1	1623 1629
														17
28 985	13 255	26 591	12 205	1	2	1	2	1	2	1	2	1	2	1711
10 609	4 399	9 508	3 851	3	4	4	4	3	4	3	4	3	4	1721
26 657	12 044	25 534	11 410	1	2	1	2	1	2	2	2	2	2	1731
														174
														1741
8 179 12 426 1 816	2 998 4 693 676	7 545 12 317 1 624	2 631 4 857 584	3 4 6	5 2 6	4 3 6	6 3 6	4 2 6	5 2 6	4 7 7	6 3 6	4 6 8	6 3 7	1742 1743
														175
5 229 2 050	2 031 797	4 507 1 848	1 737 731	5 7	6 6	5 6	6 6	5 7	6 6	5 7	7 7	5 7	6 7	1751 1752
11 637	4 880	10 151	4 164	3	4	3	4	3	4	3	4	3	4	1761
13 069	5 462	11 791	4 838	3	4	3	4	3	4	3	4	3	4	1771
822	444	813	398	7	8	7	8	7	8	7	9	7	8	1781
														179
4 453 2 363 3 451 569	1 883 1 001 1 491 249	4 256 2 133 3 102 564	1 893 896 1 328 *259	3 3 7 20	5 4 7 29	3 3 7 18	5 3 8 23	4 4 7 17	5 4 7 25	3 3 7 22	5 4 8 28	3 4 7 26	5 4 8 41	1791 1793 1794 1795
2 815 10 736	1 386 4 056	2 680 9 790	1 233 3 593	6 4	6 5	8 3	8 4	6 4	5 5	6 4	6 5	6 4	6 5	1796 1799
(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	6552



**Table 11. Selected Industry Ratios for Establishments With Payroll in This State: 1987**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Average number of employees** per estab- lishment	Payroll per employee (\$1,000)	Construction worker hours per construction worker	Value of construction work per construction worker (\$1,000)	Average per dollar of value of construction work			
						Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Rental cost for machinery, equipment, and buildings
	<b>Construction industries and land subdividers and developers</b> .....	<b>10.9</b>	<b>20.1</b>	<b>1 708.0</b>	<b>111.6</b>	<b>.229</b>	<b>.318</b>	<b>.261</b>	<b>.019</b>
15, 16, 17	<b>Construction industries:</b>								
15	<b>Building construction—General contractors and operative builders:</b>								
152	General contractors, residential buildings:								
1521	Single-family houses .....	3.7	14.8	1 478.0	154.2	.140	.372	.298	.012
1522	Other residential buildings .....	9.7	19.1	1 474.3	218.4	.122	.239	.502	.008
1531	Operative builders .....	8.8	27.6	1 755.0	1 042.2	.078	.291	.415	.005
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses .....	26.8	20.6	1 714.3	93.2	.265	.282	.345	.014
1542	Nonresidential buildings, n.e.c. ....	15.8	21.7	1 718.4	237.8	.124	.207	.569	.008
16	<b>Heavy construction other than building construction—contractors:</b>								
1611	Highway and street construction .....	42.0	19.4	1 674.6	110.7	.201	.391	.172	.031
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction .....	61.7	19.7	2 151.2	115.1	.194	.293	.226	.024
1623	Water, sewer, and utility lines .....	19.4	20.6	1 928.9	92.9	.265	.326	.121	.049
1629	Heavy construction, n.e.c. ....	31.4	24.2	1 823.1	72.1	.402	.338	.161	.040
17	<b>Special trade contractors:</b>								
1711	Plumbing, heating, and air-conditioning .....	8.1	21.0	1 794.7	97.6	.284	.421	.096	.016
1721	Painting and paper hanging .....	7.1	16.4	1 599.3	47.5	.398	.236	.082	.024
1731	Electrical work .....	10.4	21.0	1 784.1	80.5	.334	.387	.033	.015
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework .....	7.8	15.6	1 421.6	54.7	.330	.342	.070	.024
1742	Plastering, drywall, and insulation work .....	14.1	18.5	1 568.0	71.0	.309	.390	.125	.012
1743	Terrazzo, tile, marble, and mosaic work .....	6.5	17.2	1 526.1	68.4	.310	.393	.057	.012
175	Carpentry and floor work:								
1751	Carpentry .....	4.1	14.4	1 480.5	66.4	.257	.341	.121	.007
1752	Floor laying and other floor work .....	5.7	15.4	1 549.8	100.2	.191	.467	.106	.017
1761	Roofing, siding, and sheet metal work .....	9.3	15.9	1 617.9	64.9	.305	.396	.062	.017
1771	Concrete work .....	10.5	16.2	1 621.2	65.5	.292	.400	.102	.041
1781	Water well drilling .....	4.1	17.8	2 014.7	90.1	.256	.431	.040	.017
179	Miscellaneous special trade contractors:								
1791	Structural steel erection .....	16.4	21.0	1 720.8	72.3	.338	.214	.063	.035
1793	Glass and glazing work .....	8.9	20.3	1 704.1	85.8	.325	.500	.020	.016
1794	Excavation work .....	7.5	16.9	1 654.5	81.2	.252	.288	.110	.041
1795	Wrecking and demolition work .....	8.4	16.7	1 701.1	84.7	.245	.150	.041	.033
1796	Installing building equipment, n.e.c. ....	11.5	27.3	1 858.0	95.0	.360	.247	.022	.013
1799	Special trade contractors, n.e.c. ....	7.3	16.0	1 486.5	68.4	.291	.339	.096	.021
6552	<b>Land subdividers and developers, n.e.c.</b> .....	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>

**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16, 17	<b>AUSTIN, TX MSA</b>											
	Construction industries and land subdividers and developers .....	2 004	16 164	307 035	1 544 700	1 164 410	689 319	504 399	380 290	20 949	2	2
	<b>Construction Industries:</b>											
	<b>Building construction—General contractors and operative builders:</b>											
	General contractors, residential buildings:											
	Single-family houses .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	Other residential buildings .....	50	352	7 812	28 613	16 704	8 694	8 710	11 909	(D)	8	8
	Operative builders .....	68	731	22 420	273 006	170 504	74 983	102 583	102 502	538	4	6
	General contractors, nonresidential buildings:											
	Industrial buildings and warehouses .....	23	299	5 545	43 136	28 777	13 646	15 721	14 359	470	13	28
	Nonresidential buildings, n.e.c. ....	135	1 227	25 460	224 086	102 099	52 502	50 288	121 987	771	9	6
	<b>Heavy construction other than building construction—contractors:</b>											
	Highway and street construction .....	50	1 055	19 055	112 669	91 751	57 866	36 141	20 918	7 415	6	4
	Heavy construction, except highway: Bridge, tunnel, and elevated highway construction .....	3	(D)	(D)	(D)	(D)	(D)	5 716	(D)	116	(D)	(D)
	Water, sewer, and utility lines .....	77	1 346	26 507	137 991	119 785	71 641	49 117	18 207	2 264	7	5
	Heavy construction, n.e.c. ....	75	681	13 085	41 860	37 222	26 098	11 438	4 638	1 258	10	9
	<b>Special trade contractors:</b>											
	Plumbing, heating, and air- conditioning .....	248	1 810	36 655	126 399	116 272	65 397	53 019	10 127	1 106	5	5
	Painting and paper hanging .....	95	460	8 435	19 978	17 752	13 731	(D)	2 226	126	11	10
	Electrical work .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	Masonry, stonework, tile setting, and plastering:											
	Masonry, stone setting, and other stonework .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	Plastering, drywall, and insulation work .....	40	712	8 646	28 268	27 478	19 370	8 187	790	126	30	5
	Terrazzo, tile, marble, and mosaic work .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	Carpentry and floor work:											
	Carpentry .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	Floor laying and other floorwork .....	34	248	4 258	17 461	16 131	8 588	8 618	*1 330	89	7	13
	Roofing, siding, and sheet metal work .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	Concrete work .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	Water well drilling .....	9	33	633	(D)	(D)	(D)	808	(D)	7	12	(D)
	Miscellaneous special trade contractors:											
	Structural steel erection .....	9	(D)	1 420	2 476	(D)	2 268	(D)	(D)	(D)	(D)	(D)
	Glass and glazing work .....	17	241	4 468	12 687	12 226	7 137	6 383	461	(D)	17	5
	Excavation work .....	48	254	4 620	21 886	19 397	14 233	*6 557	2 489	*231	27	40
	Wrecking and demolition work .....	7	*58	*1 251	*2 961	*2 744	*2 442	(D)	*217	(D)	54	52
	Installing building equipment, n.e.c. ....	26	358	7 249	20 313	19 212	13 732	(D)	*1 101	(D)	35	17
	Special trade contractors, n.e.c. ....	111	636	9 108	35 312	31 895	20 799	(D)	*3 417	(D)	19	22
	<b>Land subdividers and developers, n.e.c. ....</b>	<b>66</b>	<b>335</b>	<b>5 700</b>	<b>18 239</b>	<b>15 287</b>	<b>16 319</b>	<b>2 215</b>	<b>2 952</b>	<b>(D)</b>	<b>11</b>	<b>15</b>
15,16, 17	<b>DALLAS-FORT WORTH, TX CMSA</b>											
	Construction industries and land subdividers and developers .....	8 403	94 140	2 057 500	9 905 492	7 170 243	4 376 142	2 957 495	2 735 249	109 020	1	1
	<b>Construction Industries:</b>											
	<b>Building construction—General contractors and operative builders:</b>											
	General contractors, residential buildings:											
	Single-family houses .....	799	3 930	63 870	465 596	327 775	180 731	158 170	137 821	6 410	5	7
	Other residential buildings .....	65	549	9 906	93 440	57 065	37 876	19 363	36 375	156	6	2
	Operative builders .....	426	3 874	113 710	1 446 648	883 999	505 485	393 602	562 649	3 457	3	5
	General contractors, nonresidential buildings:											
	Industrial buildings and warehouses .....	142	1 725	36 950	228 821	121 120	65 373	59 483	107 701	1 036	6	5
	Nonresidential buildings, n.e.c. ....	608	10 910	263 016	2 022 463	863 301	514 454	356 595	1 159 163	10 362	2	2



**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
											B	E
	<b>DALLAS-FORT WORTH, TX CMSA—Con.</b>											
	<b>Construction industries and     land subdividers and     developers—Con.</b>											
15,16, 17 16	<b>Construction industries—Con.</b>											
	<b>Heavy construction other than     building construction—contractors:</b>											
1611	Highway and street construction -----	132	5 564	125 173	640 261	528 190	306 137	237 319	112 071	19 641	3	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated											
	highway construction-----	11	1 358	26 894	162 390	(D)	72 037	50 341	(D)	(D)	(W)	(D)
1623	Water, sewer, and utility lines-----	213	5 013	124 760	394 879	356 529	215 864	(D)	38 351	7 701	3	3
1629	Heavy construction, n.e.c.-----	242	3 737	96 354	347 205	297 782	205 819	(D)	49 423	5 355	3	2
17	<b>Special trade contractors:</b>											
1711	Plumbing, heating, and air- conditioning-----	1 169	11 525	265 635	958 396	859 756	455 685	410 530	98 640	11 989	2	2
1721	Painting and paper hanging-----	449	3 011	53 796	121 915	111 785	86 256	25 703	10 131	2 080	5	4
1731	Electrical work-----	896	11 365	265 571	827 613	806 629	506 773	310 282	20 984	5 832	2	2
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework-----	321	2 707	47 851	149 939	141 303	86 262	55 451	8 636	940	8	4
1742	Plastering, drywall, and insulation work-----	319	4 239	81 015	264 081	232 086	136 135	100 122	31 995	2 226	4	3
1743	Terrazzo, tile, marble, and mosaic work-----	98	759	14 652	47 743	42 265	26 203	16 173	*5 478	50	10	13
175	Carpentry and floor work:											
1751	Carpentry-----	364	1 837	29 966	123 172	109 964	74 161	36 296	13 208	(D)	8	17
1752	Floor laying and other floorwork-----	102	619	10 709	64 192	56 111	28 498	27 854	8 080	(S)	16	17
1761	Roofing, siding, and sheet metal work-----	368	3 602	64 566	203 006	187 401	118 121	79 059	15 605	2 939	5	4
1771	Concrete work-----	455	6 252	105 853	372 771	328 212	183 394	150 633	44 560	4 535	5	7
1781	Water well drilling-----	6	63	1 699	(D)	(D)	3 115	(D)	324	(D)	(W)	(D)
179	<b>Miscellaneous special trade     contractors:</b>											
1791	Structural steel erection-----	81	1 767	41 139	114 016	103 922	86 689	22 597	10 094	947	5	5
1793	Glass and glazing work-----	105	1 284	29 893	93 815	91 838	47 401	46 398	1 977	431	3	3
1794	Excavation work-----	156	1 741	32 610	119 106	105 546	76 926	33 915	*13 561	7 488	11	7
1795	Wrecking and demolition work-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1796	Installing building equipment, n.e.c.-----	69	994	31 427	89 204	87 954	66 587	22 067	1 251	*553	4	8
1799	Special trade contractors, n.e.c.-----	426	3 233	54 697	202 656	167 346	115 977	60 558	35 310	2 641	7	6
6552	<b>Land subdividers and developers,     n.e.c.</b>	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	<b>DALLAS, TX PMSA</b>											
	<b>Construction industries and     land subdividers and     developers-----</b>	5 494	68 473	1 536 845	7 417 576	5 354 696	3 301 430	2 168 864	2 062 880	81 285	1	1
15,16, 17	<b>Construction industries:</b>											
	<b>Building construction—General     contractors and operative builders:</b>											
152	General contractors, residential buildings:											
1521	Single-family houses-----	490	2 861	46 017	337 790	241 204	135 761	111 308	96 586	3 958	5	7
1522	Other residential buildings-----	36	456	8 549	83 271	49 999	33 386	16 747	33 272	134	4	1
1531	Operative builders-----	260	3 027	87 235	1 120 614	678 866	416 549	273 503	441 748	2 442	3	5
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses-----	86	954	21 025	138 671	75 805	35 400	(D)	62 867	*487	8	6
1542	Nonresidential buildings, n.e.c.-----	437	8 268	203 751	1 551 977	659 299	393 278	271 012	892 678	8 569	2	2
16	<b>Heavy construction other than     building construction—contractors:</b>											
1611	Highway and street construction-----	82	3 895	84 738	439 986	365 133	213 702	166 358	74 853	13 519	2	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	9	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines-----	132	3 608	98 298	292 927	263 204	164 090	99 766	29 723	5 619	2	3
1629	Heavy construction, n.e.c.-----	141	2 959	81 577	287 053	250 857	176 406	(D)	36 196	3 911	3	2

**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
											B	E
	<b>DALLAS, TX PMSA—Con.</b>											
15,16, 17	<b>Construction industries and land subdividers and developers—Con. Construction industries—Con.</b>											
	<b>Special trade contractors:</b>											
1711	Plumbing, heating, and air- conditioning .....	811	8 578	202 268	735 893	653 915	346 233	313 111	81 979	9 272	2	2
1721	Painting and paper hanging .....	300	2 244	40 792	88 568	82 981	64 500	18 633	5 587	1 634	6	5
1731	Electrical work .....	586	8 252	203 343	644 176	627 328	397 007	236 537	16 847	4 470	2	2
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework .....	166	1 670	31 463	100 400	93 513	53 275	(D)	6 888	629	12	5
1742	Plastering, drywall, and insulation work .....	216	3 469	63 923	210 211	184 424	106 834	81 255	25 787	1 898	5	3
1743	Terrazzo, tile, marble, and mosaic work .....	63	478	9 456	32 676	28 182	16 523	(D)	*4 494	(D)	5	17
175	Carpentry and floor work:											
1751	Carpentry .....	262	1 394	22 632	81 162	73 134	46 514	27 049	8 028	721	8	18
1752	Floor laying and other floorwork .....	62	336	5 283	41 460	34 737	15 476	19 298	6 722	(S)	13	18
1761	Roofing, siding, and sheet metal work .....	266	2 712	47 734	150 290	139 088	89 287	56 217	11 202	2 242	6	5
1771	Concrete work .....	280	3 946	64 647	226 489	200 287	110 616	93 555	26 203	2 233	4	5
1781	Water well drilling .....	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection .....	41	971	21 292	63 518	61 106	48 515	12 799	*2 412	426	7	8
1793	Glass and glazing work .....	75	1 012	25 099	76 607	(D)	38 349	38 154	(D)	418	3	(D)
1794	Excavation work .....	88	1 131	21 501	74 476	71 143	48 783	23 452	3 333	5 414	15	10
1795	Wrecking and demolition work .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1796	Installing building equipment, n.e.c. ..	42	876	28 077	79 214	78 385	59 865	19 061	829	*515	4	9
1799	Special trade contractors, n.e.c. ....	273	2 065	37 484	145 224	115 987	81 166	42 513	29 237	1 950	7	7
6552	Land subdividers and developers, n.e.c. ....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	<b>FORT WORTH-ARLINGTON, TX PMSA</b>											
	<b>Construction industries and land subdividers and developers .....</b>	2 909	25 666	520 656	2 487 915	1 815 547	1 074 712	788 630	672 369	27 735	2	2
15,16, 17	<b>Construction industries:</b>											
	<b>Building construction—General contractors and operative builders:</b>											
152	General contractors, residential buildings:											
1521	Single-family houses .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1522	Other residential buildings .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1531	Operative builders .....	166	848	26 476	326 034	205 134	88 936	120 099	120 901	1 014	11	13
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses .....	57	771	15 926	90 150	45 315	29 973	(D)	44 834	550	9	11
1542	Nonresidential buildings, n.e.c. ....	170	2 642	59 265	470 486	204 002	121 176	85 582	266 485	1 794	5	4
16	<b>Heavy construction other than building construction—contractors:</b>											
1611	Highway and street construction .....	49	1 669	40 435	200 275	163 057	92 435	70 961	37 218	6 123	8	6
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction .....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines .....	82	1 404	26 462	101 952	93 325	51 774	(D)	8 628	2 083	8	9
1629	Heavy construction, n.e.c. ....	101	778	14 777	60 152	46 925	29 413	17 818	13 227	1 445	11	6



**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16, 17	<b>FORT WORTH-ARLINGTON, TX PMSA—Con.</b>											
	Construction industries and land subdividers and developers—Con. Construction industries—Con.											
	Special trade contractors:											
	1711 Plumbing, heating, and air- conditioning .....	358	2 947	63 368	222 503	205 841	109 452	97 419	16 662	2 716	4	3
	1721 Painting and paper hanging .....	150	767	13 004	33 347	28 804	21 756	7 070	4 544	446	11	10
	1731 Electrical work .....	310	3 113	62 228	183 437	179 300	109 766	73 746	4 137	1 362	5	4
	174 Masonry, stonework, tile setting, and plastering:											
	1741 Masonry, stone setting, and other stonework .....	155	1 037	16 388	49 538	47 790	32 988	(D)	1 748	311	10	8
	1742 Plastering, drywall, and insulation work .....	103	770	17 092	53 870	47 662	29 301	18 867	*6 208	328	9	9
	1743 Terrazzo, tile, marble, and mosaic work .....	35	281	5 196	15 067	14 083	9 680	(D)	984	(D)	25	16
	175 Carpentry and floor work:											
	1751 Carpentry .....	102	443	7 334	42 010	36 830	*27 647	9 248	5 180	(D)	20	37
	1752 Floor laying and other floorwork .....	40	283	5 426	22 732	21 374	13 021	8 556	1 358	-	32	34
	1761 Roofing, siding, and sheet metal work .....	103	890	16 832	52 716	48 313	28 834	22 842	4 403	697	6	8
	1771 Concrete work .....	175	2 306	41 206	146 282	127 925	72 778	57 077	*18 357	2 302	10	15
	1781 Water well drilling .....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	179 Miscellaneous special trade contractors:											
	1791 Structural steel erection .....	40	796	19 847	50 498	42 816	38 174	9 798	7 682	521	7	4
	1793 Glass and glazing work .....	30	272	4 793	17 208	(D)	9 052	8 244	(D)	(D)	6	(D)
	1794 Excavation work .....	68	610	11 110	44 630	34 403	28 143	10 464	*10 227	2 075	14	10
	1795 Wrecking and demolition work .....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1796 Installing building equipment, n.e.c. ....	27	119	3 350	9 991	9 569	6 722	3 006	*422	38	19	26
	1799 Special trade contractors, n.e.c. ....	153	1 167	17 213	57 432	51 359	34 811	18 045	6 073	691	13	12
6552	Land subdividers and developers, n.e.c. ....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
15,16, 17	<b>HOUSTON-GALVESTON- BRAZORIA, TX CMSA</b>											
	Construction industries and land subdividers and developers .....	5 806	104 331	2 342 204	9 226 654	6 609 192	4 052 046	3 000 575	2 617 462	97 964	1	1
	Construction industries:											
	Building construction—General contractors and operative builders:											
	152 General contractors, residential buildings:											
	1521 Single-family houses .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	1522 Other residential buildings .....	74	1 051	22 003	179 959	91 647	41 261	50 721	88 313	194	13	10
	1531 Operative builders .....	154	2 272	62 045	823 401	453 495	266 129	204 985	369 906	(D)	4	4
	154 General contractors, nonresidential buildings:											
	1541 Industrial buildings and warehouses .....	95	1 367	32 086	164 077	93 503	55 642	42 702	70 574	1 385	9	6
	1542 Nonresidential buildings, n.e.c. ....	501	11 291	257 960	2 185 803	905 511	475 365	473 606	1 280 292	5 524	2	2
	16 Heavy construction other than building construction—contractors:											
	1611 Highway and street construction .....	113	5 261	90 083	584 518	481 299	175 008	311 726	103 219	9 501	2	1
	162 Heavy construction, except highway: Bridge, tunnel, and elevated											
	1622 highway construction .....	22	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines .....	160	4 073	86 849	344 313	302 807	200 306	106 855	41 506	8 890	4	5
1629	Heavy construction, n.e.c. ....	275	31 260	805 225	1 731 720	1 416 475	1 071 393	642 054	315 245	21 888	1	1

Table 12. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>HOUSTON-GALVESTON- BRAZORIA, TX CMSA—Con.</b>											
	<b>Construction industries and land subdividers and developers—Con.</b>											
15,16, 17	<b>Construction industries—Con.</b>											
	<b>Special trade contractors:</b>											
1711	Plumbing, heating, and air- conditioning-----	846	8 822	205 531	695 055	621 068	355 511	277 750	73 987	8 059	2	2
1721	Painting and paper hanging-----	302	3 622	65 039	167 085	156 711	113 621	43 752	10 374	2 131	5	4
1731	Electrical work -----	600	8 346	182 940	496 633	479 639	296 169	187 638	16 994	5 073	3	2
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework -----	143	2 134	37 821	98 851	94 868	61 883	34 139	3 984	430	5	5
1742	Plastering, drywall, and insulation work -----	190	4 664	99 546	306 424	263 201	130 232	136 672	43 223	1 630	1	5
1743	Terrazzo, tile, marble, and mosaic work -----	63	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry -----	238	1 437	23 924	85 575	74 331	42 335	34 334	11 244	557	9	14
1752	Floor laying and other floorwork-----	66	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1761	Roofing, siding, and sheet metal work -----	269	2 667	45 785	152 235	141 824	90 504	57 993	10 412	1 959	4	8
1771	Concrete work -----	228	2 901	57 496	184 339	172 141	101 824	71 503	12 198	2 854	6	5
1781	Water well drilling -----	21	250	5 570	20 433	(D)	10 607	9 327	(D)	(D)	11	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	68	1 661	39 171	124 371	119 609	96 553	(D)	4 762	1 064	3	3
1793	Glass and glazing work -----	76	529	10 501	29 913	28 823	15 962	(D)	*1 089	*158	11	11
1794	Excavation work -----	77	647	10 665	45 115	40 222	29 831	(D)	4 893	1 030	12	12
1795	Wrecking and demolition work -----	9	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.-----	68	1 019	31 947	80 431	78 785	59 808	19 716	1 646	*662	4	2
1799	Special trade contractors, n.e.c.-----	334	4 054	69 088	244 066	228 265	141 682	92 315	15 801	2 933	6	4
6552	Land subdividers and developers, n.e.c.-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	<b>BRAZORIA, TX PMSA</b>											
	<b>Construction industries and land subdividers and developers-----</b>	296	6 207	130 349	373 232	308 071	209 039	102 517	65 160	5 798	2	3
15,16, 17	<b>Construction industries:</b>											
	<b>Building construction—General contractors and operative builders:</b>											
152	General contractors, residential buildings:											
1521	Single-family houses -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1522	Other residential buildings -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1531	Operative builders -----	3	18	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(W)	(D)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	10	(D)	(D)	16 055	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1542	Nonresidential buildings, n.e.c.-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
16	<b>Heavy construction other than building construction—contractors:</b>											
1611	Highway and street construction -----	5	63	1 012	(D)	(D)	2 059	1 053	(D)	(D)	(W)	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	15	465	9 467	23 582	21 567	14 672	(D)	2 015	(D)	(W)	(W)
1629	Heavy construction, n.e.c.-----	13	1 420	35 339	(D)	(D)	43 993	(D)	(D)	772	(W)	(D)



**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>BRAZORIA, TX PMSA—Con.</b>											
	<b>Construction industries and     land subdividers and     developers—Con.</b>											
15,16, 17 17	<b>Construction industries—Con.</b>											
	<b>Special trade contractors:</b>											
1711	Plumbing, heating, and air- conditioning-----	31	1 107	27 364	58 134	53 463	38 990	14 640	4 671	448	6	7
1721	Painting and paper hanging-----	11	637	10 692	(D)	(D)	(D)	6 758	(D)	(D)	(W)	(D)
1731	Electrical work -----	48	569	10 918	26 418	26 096	16 956	(D)	*321	*1 020	19	17
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework-----	7	60	(D)	(D)	(D)	(D)	(D)	(D)	(D)	11	(D)
1742	Plastering, drywall, and insulation work -----	12	600	10 805	30 311	(D)	19 338	9 453	(D)	(D)	(W)	(D)
1743	Terrazzo, tile, marble, and mosaic work -----	-	-	-	-	-	-	-	-	-	-	-
175	Carpentry and floor work:											
1751	Carpentry-----	10	15	(D)	(D)	(D)	(D)	(D)	(D)	(D)	38	(D)
1752	Floor laying and other floorwork-----	-	-	-	-	-	-	-	-	-	-	-
1761	Roofing, siding, and sheet metal work -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1771	Concrete work -----	*17	252	4 426	(D)	(D)	7 830	(D)	(D)	*243	10	(D)
1781	Water well drilling -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection-----	3	16	(D)	(D)	(D)	201	(D)	-	-	(W)	(D)
1793	Glass and glazing work -----	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1794	Excavation work-----	9	73	1 223	(D)	(D)	3 509	*937	(D)	*334	17	(D)
1795	Wrecking and demolition work-----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.-----	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1799	Special trade contractors, n.e.c.-----	*19	97	1 555	*5 027	4 700	3 432	(D)	*327	(D)	21	40
6552	<b>Land subdividers and developers,     n.e.c.-----</b>	5	6	38	*159	*129	*81	50	(S)	-	25	47
	<b>GALVESTON-TEXAS CITY, TX PMSA</b>											
	<b>Construction industries and     land subdividers and     developers-----</b>	320	3 124	52 842	205 560	157 197	102 425	56 789	48 363	2 797	4	5
15,16, 17	<b>Construction industries:</b>											
	<b>Building construction—General     contractors and operative builders:</b>											
152	General contractors, residential buildings:											
1521	Single-family houses-----	43	121	2 210	*17 028	*13 919	4 966	*9 624	*3 108	*311	25	44
1522	Other residential buildings-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1531	Operative builders-----	*13	42	(D)	(D)	(D)	(D)	(D)	(D)	(D)	18	(D)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses-----	3	(D)	(D)	5 190	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1542	Nonresidential buildings, n.e.c.-----	33	254	4 076	38 670	15 176	7 699	(D)	23 494	*147	22	29
16	<b>Heavy construction other than     building construction—contractors:</b>											
1611	Highway and street construction-----	9	211	4 060	(D)	(D)	8 527	8 675	(D)	(D)	11	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	-	-	-	-	-	-	-	-	-	-	-
1623	Water, sewer, and utility lines-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1629	Heavy construction, n.e.c.-----	29	859	13 296	(D)	(D)	22 969	(D)	(D)	210	3	(D)

**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>GALVESTON-TEXAS CITY, TX PMSA—Con.</b>											
	<b>Construction Industries and land subdividers and developers—Con.</b>											
15,16, 17	<b>Construction Industries—Con.</b>											
	<b>Special trade contractors:</b>											
1711	Plumbing, heating, and air- conditioning -----	59	256	4 440	15 525	15 006	8 808	6 329	*519	*152	20	17
1721	Painting and paper hanging -----	11	149	2 594	(D)	(D)	(D)	925	(D)	(D)	5	(D)
1731	Electrical work -----	38	480	8 368	20 118	19 188	14 547	(D)	930	*590	23	8
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework -----	3	18	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(W)	(D)
1742	Plastering, drywall, and insulation work -----	5	(S)	(S)	(S)	(D)	(S)	(S)	(D)	(D)	(S)	(D)
1743	Terrazzo, tile, marble, and mosaic work -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1752	Floor laying and other floorwork -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1761	Roofing, siding, and sheet metal work -----	12	153	2 951	9 077	8 725	6 400	(D)	352	144	10	9
1771	Concrete work -----	6	64	842	(D)	(D)	877	(D)	(D)	(S)	20	(D)
1781	Water well drilling -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	3	55	(D)	(D)	(D)	1 306	299	-	-	(W)	(D)
1793	Glass and glazing work -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1794	Excavation work -----	*12	(S)	(S)	(D)	(D)	(S)	(S)	(D)	-	(S)	(D)
1795	Wrecking and demolition work -----	-	-	-	-	-	-	-	-	-	-	-
1796	Installing building equipment, n.e.c. -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1799	Special trade contractors, n.e.c. -----	10	104	1 536	*6 034	4 750	2 963	(D)	*1 284	(D)	30	38
6552	Land subdividers and developers, n.e.c. -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	<b>HOUSTON, TX PMSA</b>											
	<b>Construction Industries and land subdividers and developers -----</b>	5 190	95 000	2 159 013	8 647 863	6 143 923	3 740 582	2 841 269	2 503 940	89 369	1	1
15,16, 17	<b>Construction Industries:</b>											
	<b>Building construction—General contractors and operative builders:</b>											
152	General contractors, residential buildings:											
1521	Single-family houses -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1522	Other residential buildings -----	62	972	20 444	168 264	85 581	37 255	48 662	82 683	194	12	9
1531	Operative builders -----	138	2 212	60 647	808 831	446 022	262 088	201 442	362 809	(D)	4	4
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	82	1 134	27 700	142 832	81 200	49 209	36 765	61 632	929	10	6
1542	Nonresidential buildings, n.e.c. -----	458	10 692	246 590	2 094 898	864 632	451 524	456 544	1 230 266	5 104	2	2
16	<b>Heavy construction other than building construction—contractors:</b>											
1611	Highway and street construction -----	99	4 987	85 011	561 339	461 091	164 422	301 998	100 248	8 360	2	1
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction -----	21	595	11 834	61 064	53 072	29 598	23 600	7 992	3 894	5	4
1623	Water, sewer, and utility lines -----	138	3 563	76 625	318 879	279 475	184 198	98 456	39 404	8 153	4	5
1629	Heavy construction, n.e.c. -----	233	28 982	756 590	1 627 259	1 326 440	1 004 432	618 916	300 819	20 906	1	1



**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

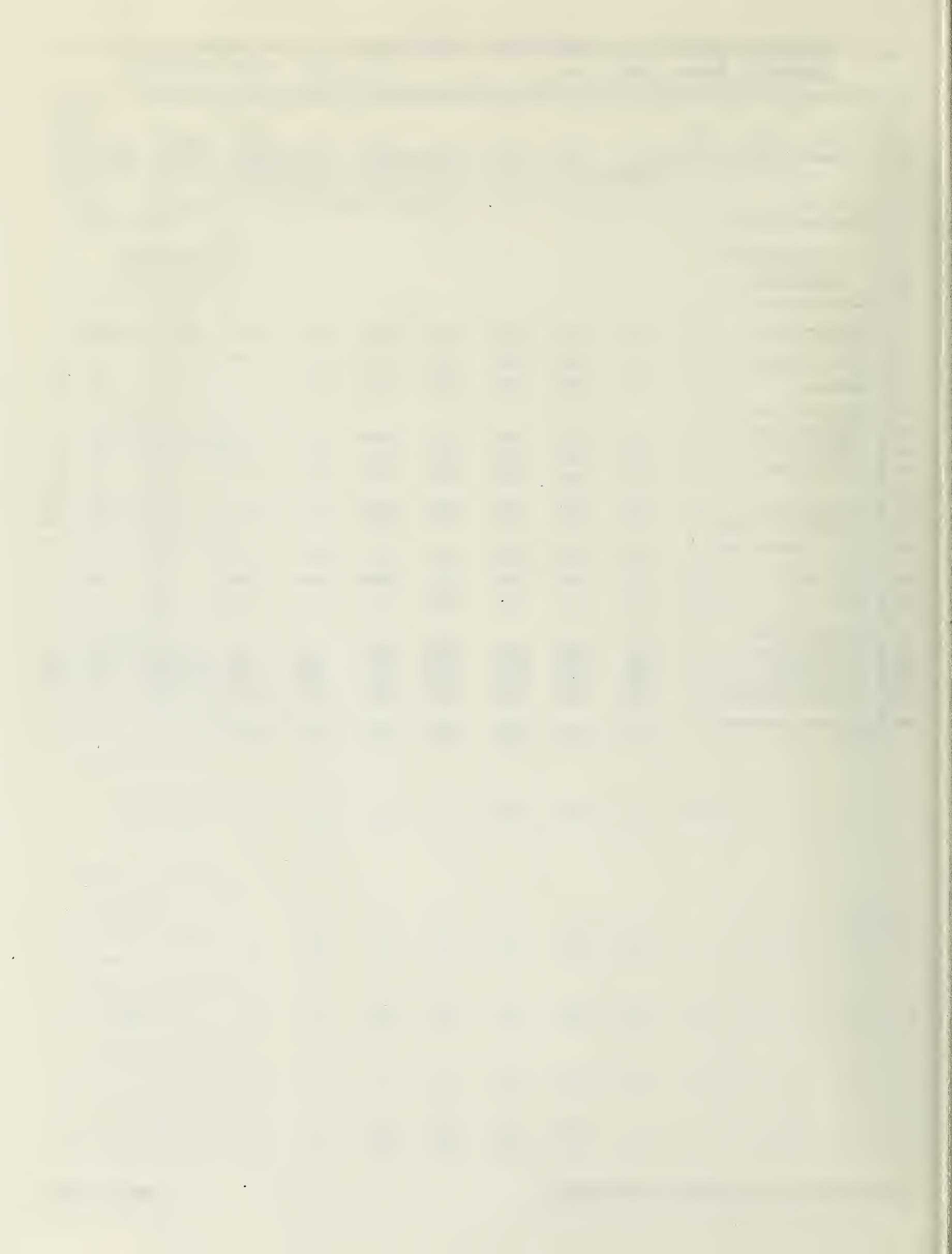
1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>HOUSTON, TX PMSA—Con.</b>											
	<b>Construction Industries and land subdividers and developers—Con.</b>											
15,16, 17	<b>Construction Industries—Con.</b>											
	<b>Special trade contractors:</b>											
1711	Plumbing, heating, and air- conditioning .....	755	7 459	173 728	621 396	552 599	307 713	256 780	68 797	7 459	2	2
1721	Painting and paper hanging .....	280	2 837	51 753	132 572	122 494	87 075	36 069	10 078	1 727	6	6
1731	Electrical work .....	513	7 297	163 654	450 098	434 354	264 666	173 670	15 743	3 463	3	2
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework .....	133	2 056	36 650	96 582	92 647	60 207	33 449	3 936	423	5	5
1742	Plastering, drywall, and insulation work .....	173	4 006	87 900	272 612	231 832	109 494	125 878	40 780	1 259	2	6
1743	Terrazzo, tile, marble, and mosaic work .....	61	428	7 386	22 750	22 245	12 473	10 536	*506	195	18	17
175	Carpentry and floor work:											
1751	Carpentry .....	220	1 394	23 275	82 221	71 336	40 427	33 246	10 885	442	10	14
1752	Floor laying and other floorwork .....	65	713	13 596	61 413	54 955	27 573	29 074	6 457	*113	7	7
1761	Roofing, siding, and sheet metal work .....	237	2 424	41 703	139 828	129 819	82 411	53 420	10 009	1 760	5	8
1771	Concrete work .....	205	2 585	52 228	165 312	155 093	93 117	62 900	10 219	2 587	6	5
1781	Water well drilling .....	*15	227	5 131	19 230	(D)	9 530	8 550	(D)	(D)	12	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection .....	62	1 591	38 303	122 515	117 753	95 046	(D)	4 762	1 064	3	4
1793	Glass and glazing work .....	71	486	9 609	27 189	26 322	14 603	12 715	*866	*141	12	12
1794	Excavation work .....	56	549	9 083	37 338	33 170	23 816	(D)	4 168	696	14	13
1795	Wrecking and demolition work .....	8	122	4 006	20 266	(D)	19 273	703	(D)	(D)	(W)	(D)
1796	Installing building equipment, n.e.c. ....	63	994	31 351	78 434	76 803	58 285	19 252	1 631	*660	4	2
1799	Special trade contractors, n.e.c. ....	305	3 853	65 997	233 006	218 815	135 287	89 206	14 191	2 893	6	4
6552	Land subdividers and developers, n.e.c. ....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	<b>SAN ANTONIO, TX MSA</b>											
	<b>Construction Industries and land subdividers and developers .....</b>	<b>2 700</b>	<b>32 848</b>	<b>601 428</b>	<b>2 686 665</b>	<b>2 000 664</b>	<b>1 210 083</b>	<b>829 948</b>	<b>686 001</b>	<b>40 960</b>	<b>1</b>	<b>1</b>
15,16, 17	<b>Construction Industries:</b>											
	<b>Building construction—General contractors and operative builders:</b>											
152	General contractors, residential buildings:											
1521	Single-family houses .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1522	Other residential buildings .....	19	378	7 910	90 366	24 244	16 797	7 991	66 122	838	18	12
1531	Operative builders .....	66	766	18 883	252 073	124 941	40 776	87 316	127 132	(D)	7	5
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses .....	21	197	4 295	14 713	8 803	5 493	3 333	5 910	*59	23	18
1542	Nonresidential buildings, n.e.c. ....	225	2 993	53 135	379 299	168 720	91 025	84 058	210 579	2 704	5	6
16	<b>Heavy construction other than building construction—contractors:</b>											
1611	Highway and street construction .....	83	9 184	190 950	695 782	588 989	378 862	217 155	106 793	3 359	1	1
162	Heavy construction, except highway:											
1822	Bridge, tunnel, and elevated highway construction .....	7	462	7 376	26 359	23 099	13 668	(D)	3 260	(D)	6	3
1623	Water, sewer, and utility lines .....	45	1 845	32 339	155 773	127 586	84 370	(D)	28 188	4 238	4	2
1629	Heavy construction, n.e.c. ....	48	636	15 733	49 060	42 970	30 113	13 153	6 090	(D)	3	2

**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>SAN ANTONIO, TX MSA—Con.</b>											
	<b>Construction Industries and land subdividers and developers—Con.</b>											
15,16, 17 17	<b>Construction Industries—Con.</b>											
	<b>Special trade contractors:</b>											
1711	Plumbing, heating, and air- conditioning .....	348	3 343	67 430	236 288	209 784	122 017	92 427	26 505	1 767	4	4
1721	Painting and paper hanging .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1731	Electrical work .....	203	2 524	43 845	139 190	135 677	76 070	60 677	3 513	1 146	4	3
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework .....	82	558	8 483	25 016	23 438	15 435	8 056	1 577	129	8	5
1742	Plastering, drywall, and insulation work .....	98	933	16 311	61 464	54 849	34 150	22 047	6 616	828	7	6
1743	Terrazzo, tile, marble, and mosaic work .....	55	238	4 000	14 668	14 177	8 850	5 372	*491	(D)	13	19
175	Carpentry and floor work:											
1751	Carpentry .....	149	452	5 418	19 538	17 380	10 424	7 036	2 158	267	17	15
1752	Floor laying and other floorwork .....	38	355	3 330	13 878	(D)	6 600	6 769	(D)	(S)	22	(D)
1761	Roofing, siding, and sheet metal work .....	160	1 403	22 494	74 848	71 150	42 329	30 194	3 698	1 476	9	7
1771	Concrete work .....	105	1 296	15 623	50 919	46 607	26 958	19 831	4 312	303	10	10
1781	Water well drilling .....	8	31	771	1 868	(D)	1 322	537	(D)	-	11	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection .....	39	505	6 046	17 101	15 577	11 071	4 676	1 524	*410	13	11
1793	Glass and glazing work .....	41	395	7 794	23 919	23 717	13 545	12 051	201	43	3	3
1794	Excavation work .....	47	217	3 456	15 992	13 427	7 762	*5 758	*2 565	(D)	31	28
1795	Wrecking and demolition work .....	*12	*154	*1 554	*6 301	*6 219	*3 724	(D)	*82	(S)	61	64
1796	Installing building equipment, n.e.c. ..	13	272	6 906	21 309	21 100	15 943	(D)	209	205	16	8
1799	Special trade contractors, n.e.c. ....	156	1 152	17 069	58 543	53 006	34 918	19 490	5 537	371	12	12
6552	<b>Land subdividers and developers, n.e.c. ....</b>	94	621	11 662	83 864	56 497	47 494	*10 886	27 367	1 231	10	19





# APPENDIX A.

## Explanation of Terms

**Construction**—Is composed of three broad categories:

1. **New construction**—Includes the complete, original erection of structures and essential service facilities and the initial installation of integral equipment such as elevators, and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations or reconstruction**—Includes construction activity making structural changes to existing facilities. Generally, this type of activity is considered a capital investment in the property.
3. **Maintenance and repair**—Includes construction done for the purpose of upkeep of property rather than additional investment in the property.

Examples of the general distinction between maintenance and repair and reconstruction are provided here: roof repairs, including the replacement of shingles, gutters, etc., are classified under maintenance and repairs. A complete reroofing, however, is classified as reconstruction.

**Number of establishments in business during year**—Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

**Proprietors and working partners**—These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

**All employees**—Comprise all full-time and part-time employees on the payrolls of construction establishments, who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

**Construction workers**—Includes all workers up through the working foreman level directly engaged in construction operations, such as painters, carpenters, plumbers, and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment

operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

**Other employees**—Includes employees in executive, purchasing, accounting, personnel, professional, technical activities, and routine office functions. Also included are supervisory employees above the working foreman level.

**Construction worker hours**—Includes the total number of hours worked by construction workers. Construction worker hours were collected for each of the four quarters of 1987.

**Payroll**—Includes the gross earnings paid in the calendar year 1987 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if an unincorporated concern.

**Employer costs for fringe benefits (supplemental labor costs)**—Represents expenditures made by the employer during 1987 for legally required and voluntary fringe benefit programs for employees.

**Legally required contributions**—Include Social Security contributions, unemployment compensation, workman's compensation, and State temporary disability payments.

**Voluntary payments**—Include life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

**Value of construction work done**—Includes all value of construction work done during 1987 for construction work performed by general contractors, special trades contractors, subcontractors, and land development and improvement work. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.



Builders were instructed to include the value of buildings and other structures built or being built for sale in 1987 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators, etc., were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

**Land receipts**—Includes receipts from the sale of land, whether held for sale or sold in connection with the sale of houses and other structures. It excludes the value of any improvements made to the land prior to the sale. (That value was to be included in the value of construction work done.)

**Other business receipts**—Includes business receipts not reported as value of construction work done or land receipts. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

**Net value of construction work**—Derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

**Value added**—Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted to others, and costs for materials, components, supplies and fuels. For SIC 6552 and SIC 1531, for which land receipts are significant, land receipts are also subtracted from dollar value of business done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

**Selected costs**—Represents the costs for materials, components, and supplies; costs for construction work subcontracted to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1987 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)
- freight and other direct charges should represent only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, are included in this item as are costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment, such as printing presses; computer systems; etc., which are not an integral part of a structure
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted to others include:

- all costs during 1987 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- The costs to the reporting establishment for its purchases of materials, components, and supplies, provided to a subcontractor for his use. Such costs are reported under a separate category, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies, or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal and coke products, etc.

**Rental costs for machinery, equipment, and buildings**—Includes all costs during 1987 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It



excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

**Selected purchased services**—Includes all costs during 1987 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies, or from other establishments of the same company. It includes only the cost of that repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property, or the cost of adapting it for another use. Such costs are included in "capital expenditures".

**Assets and depreciation**—Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices, shops, etc.); stationary machinery (generators, shop equipment, etc.); mobile machinery (tractors, trucks, etc.); and other equipment (office furniture and fixtures, etc.). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and, (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, destroyed, etc., during 1987.

**Capital expenditures**—Refers to all costs actually incurred during 1987 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1987.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

**Inventories**—Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to report work in progress and finished units not sold for buildings and other structures built for sale.

Inventories of multi-establishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

**Ownership of construction projects**—This item shows the distribution of the value of construction work done by ownership of the project, that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal, and State and local governments.

**Value of construction work subcontracted in from others**—Includes the value of construction work during 1987 for work done by reporting establishments for other construction contractors or builders. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

**Types of construction**—This item provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1987. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose, i.e, office and residential, or commercial, they were to classify the building by major purpose.

In addition all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached**—Includes all residential buildings constructed for one family use.
- **Single-family houses, attached (include townhouses)**—Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken wall from ground to roof.
- **Apartment buildings with two or more apartments**—Includes high-rise, low-rise, or any structures containing two or more housing units (excluding attached single-family houses and townhouses described above).
- **Hotels and motels**—Includes hotels, motels, and tourist cabins intended for transient accommodations.



- **Other residential buildings**—Includes dormitories, fraternity and sorority houses, nurses homes, and other nonhousekeeping residential structures.
- **Office buildings**—Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more.
- **Other commercial buildings, such as stores, restaurants, and automobile service stations**—Includes all buildings which are intended for use primarily in the wholesale, retail, and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
- **Industrial buildings**—Includes all industrial buildings and plants which are used to house production and assembly activities. Heavy industrial facilities such as blast furnaces, petroleum refineries, chemical complexes, etc., are not included in this category, but under nonbuilding construction.
- **Warehouses**—Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
- **Religious buildings**—Includes all buildings which are intended for religious services or functions, such as churches, synagogues, convents, monasteries, and seminaries.
- **Educational buildings**—Includes all buildings which are used directly in administrative and instructional activities, such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing establishment, are also included.
- **Hospitals and institutional buildings**—Includes all buildings which are intended to provide hospital and institutional care, such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- **Farm buildings, nonresidential**—Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- **Amusement, social, and recreational buildings**—Includes buildings which are used primarily for entertainment, social and recreational activities, such as sports arenas, theaters, music halls, golf and country club buildings, skating rinks, bowling alleys, and indoor swimming pools.
- **Other nonresidential buildings**—Includes nonresidential buildings which are not classified elsewhere, such as fire stations, prisons, civic centers, bus and air passenger terminals and hangars.

#### Nonbuilding construction:

- **Highways, streets and related work, such as installation of guardrails, highway signs, etc.**—Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control and lighting. Also includes earthwork protective structures when used in connection with road improvements.
- **Outdoor swimming pools**—Includes wading pools and reflecting pools.
- **Recreational facilities**—Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
- **Bridges and elevated highways**—Includes viaducts and overpasses; roads, highways, railroads, and causeways built on structural supports.
- **Tunnels**—Includes highway, pedestrian, and railroad tunnels.
- **Railroad construction**—Includes the construction of railroad beds, tracks, freight yards, and signal towers.
- **Subway construction**—Includes urban mass transit subway systems above or below ground.
- **Dam and reservoir construction**—Includes hydroelectric, water supply, and flood control dams and reservoirs.
- **Marine construction**—Includes dredging, underwater rock removal, breakwaters, navigational channels, jetties, and locks.
- **Harbor and port facilities**—Includes docks, piers, and wharves.
- **Conservation and development construction**—Includes land reclamation, irrigation projects, drainage canals, levees, and flood control projects.
- **Power and communication transmission lines, towers, and related facilities**—Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, electric light and power facilities.
- **Power plants, except nuclear**—Includes electric and steam generating plants.
- **Power plants, nuclear**—Includes atomic energy plants, and nuclear reactors.
- **Sewers, sewerlines, and related facilities**—Includes sanitary and storm sewers, and related facilities.
- **Sewage treatment plants**—Includes sewage treatment and waste disposal plants.
- **Water mains and related facilities**—Includes water supply systems and related facilities.

- **Water treatment plants**—Includes water filtration and water softening plants.
- **Pipeline construction other than sewer or waterlines**—Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- **Blast furnaces, petroleum refineries, chemical complexes, etc.**—Includes coke ovens, and mining appurtenances such as tipples and washeries.
- **Other nonbuilding construction**—Includes all types of nonbuilding construction, not included elsewhere.





## APPENDIX B.

### Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
<b>15</b>	<b>BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS</b>	<b>17</b>	<b>CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.</b>
<b>152</b>	<b>General Building Contractors—Residential Buildings</b>	<b>173</b>	<b>Electrical Work Special Trade Contractors</b>
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	<b>174</b>	<b>Masonry, Stone Work Tile Setting, and Plastering Special Trade Contractors</b>
<b>153</b>	<b>Operative Builders</b>	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
<b>154</b>	<b>General Building Contractors—Nonresidential Buildings</b>	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	<b>175</b>	<b>Carpentry and Floor Work Special Trade Contractors</b>
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
<b>16</b>	<b>HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS</b>	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
<b>161</b>	<b>Highway and Street Construction, Except Elevated Highways</b>	<b>176</b>	<b>Roofing, Siding, and Sheet Metal Work Special Trade Contractors</b>
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
<b>162</b>	<b>Heavy Construction, Except Highway and Street Construction</b>	<b>177</b>	<b>Concrete Work Special Trade Contractors</b>
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Powerline Construction	<b>178</b>	<b>Water Well Drilling Special Trade Contractors</b>
1629	Heavy Construction, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
<b>17</b>	<b>CONSTRUCTION—SPECIAL TRADE CONTRACTORS</b>	<b>179</b>	<b>Miscellaneous Special Trade Contractors</b>
<b>171</b>	<b>Plumbing, Heating, and Air-Conditioning Special Trade Contractors</b>	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
<b>172</b>	<b>Painting and Paper Hanging Special Trade Contractors</b>	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified
		<b>6552</b>	<b>LAND SUBDIVIDERS AND DEVELOPERS, EXCEPT CEMETERIES</b>





# **APPENDIX C.**

## **Regions, Census Divisions, and States**

### **NORTHEAST**

#### **New England States**

Connecticut  
Maine  
Massachusetts  
New Hampshire  
Rhode Island  
Vermont

#### **Middle Atlantic States**

New Jersey  
New York  
Pennsylvania

### **MIDWEST**

#### **East North Central States**

Illinois  
Indiana  
Michigan  
Ohio  
Wisconsin

#### **West North Central States**

Iowa  
Kansas  
Minnesota  
Missouri  
Nebraska  
North Dakota  
South Dakota

### **SOUTH**

#### **South Atlantic States**

Delaware  
District of Columbia  
Florida  
Georgia  
Maryland

#### **South Atlantic States—Con.**

North Carolina  
South Carolina  
Virginia  
West Virginia

#### **East South Central States**

Alabama  
Kentucky  
Mississippi  
Tennessee

#### **West South Central States**

Arkansas  
Louisiana  
Oklahoma  
Texas

### **WEST**

#### **Mountain States**

Arizona  
Colorado  
Idaho  
Montana  
Nevada  
New Mexico  
Utah  
Wyoming

#### **Pacific States**

Alaska  
California  
Hawaii  
Oregon  
Washington



1911

1912

1913

1914

1915

1916

1917

1918

1919

1920

1911

1912

1913

1914

1915

1916

1917

1918

1919

1920

# APPENDIX D.

## Metropolitan Statistical Areas

[Titles and definitions shown for MSA's, PMSA's, and CMSA's are those established by the Office of Management and Budget, as of June 30, 1987]

### Abilene, TX MSA

Taylor County, TX

### Akron, OH PMSA—see Cleveland-Akron-Lorain, OH CMSA

### Albany, GA MSA

Dougherty County, GA

Lee County, GA

### Albany-Schenectady-Troy, NY MSA

Albany County, NY

Greene County, NY

Montgomery County, NY

Rensselaer County, NY

Saratoga County, NY

Schenectady County, NY

### Albuquerque, NM MSA

Bernalillo County, NM

### Alexandria, LA MSA

Rapides Parish, LA

### Allentown-Bethlehem, PA-NJ MSA

Warren County, NJ

Carbon County, PA

Lehigh County, PA

Northampton County, PA

### Altoona, PA MSA

Blair County, PA

### Amarillo, TX MSA

Potter County, TX

Randall County, TX

### Anaheim-Santa Ana, CA PMSA—see Los Angeles-Anaheim-Riverside, CA CMSA

### Anchorage, AK MSA

Anchorage Borough, AK

### Anderson, IN MSA

Madison County, IN

### Anderson, SC MSA

Anderson County, SC

### Ann Arbor, MI PMSA—see Detroit-Ann Arbor, MI CMSA

### Anniston, AL MSA

Calhoun County, AL

### Appleton-Oshkosh-Neenah, WI MSA

Calumet County, WI

Outagamie County, WI

Winnebago County, WI

### Asheville, NC MSA

Buncombe County, NC

### Athens, GA MSA

Clarke County, GA

Jackson County, GA

Madison County, GA

Oconee County, GA

### Atlanta, GA MSA

Barrow County, GA

Butts County, GA

Cherokee County, GA

Clayton County, GA

Cobb County, GA

Coweta County, GA

De Kalb County, GA

Douglas County, GA

### Atlanta, GA MSA—Con.

Fayette County, GA

Forsyth County, GA

Fulton County, GA

Gwinnett County, GA

Henry County, GA

Newton County, GA

Paulding County, GA

Rockdale County, GA

Spalding County, GA

Walton County, GA

### Atlantic City, NJ MSA

Atlantic County, NJ

Cape May County, NJ

### Augusta, GA-SC MSA

Columbia County, GA

McDuffie County, GA

Richmond County, GA

Aiken County, SC

### Aurora-Elgin, IL PMSA—see Chicago-Gary-Lake County, IL-IN-WI CMSA

### Austin, TX MSA

Hays County, TX

Travis County, TX

Williamson County, TX

### Bakersfield, CA MSA

Kern County, CA

### Baltimore, MD MSA

Anne Arundel County, MD

Baltimore County, MD

Carroll County, MD

Harford County, MD

Howard County, MD

Queen Anne's County, MD

Baltimore city, MD

### Bangor, ME MSA

Penobscot County, ME (part)

Bangor city, ME

Brewer city, ME

Eddington town, ME

Glenburn town, ME

Hampden town, ME

Hermon town, ME

Holden town, ME

Kenduskeag town, ME

Old Town city, ME

Orono town, ME

Orrington town, ME

Penobscot Indian Island Indian Reservation, ME

Veazie town, ME

Waldo County, ME (part)

Winterport town, ME

### Baton Rouge, LA MSA

Ascension Parish, LA

East Baton Rouge Parish, LA

Livingston Parish, LA

West Baton Rouge Parish, LA

### Battle Creek, MI MSA

Calhoun County, MI

### Beaumont-Port Arthur, TX MSA

Hardin County, TX

Jefferson County, TX

Orange County, TX

### Beaver County, PA PMSA—see Pittsburgh-Beaver Valley, PA CMSA

### Bellingham, WA MSA

Whatcom County, WA

### Benton Harbor, MI MSA

Berrien County, MI

### Bergen-Passaic, NJ PMSA—see New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA

### Billings, MT MSA

Yellowstone County, MT

### Biloxi-Gulfport, MS MSA

Hancock County, MS

Harrison County, MS

### Binghamton, NY MSA

Broome County, NY

Tioga County, NY

### Birmingham, AL MSA

Blount County, AL

Jefferson County, AL

St. Clair County, AL

Shelby County, AL

Walker County, AL

### Bismarck, ND MSA

Burleigh County, ND

Morton County, ND

### Bloomington, IN MSA

Monroe County, IN

### Bloomington-Normal, IL MSA

McLean County, IL

### Boise City, ID MSA

Ada County, ID

### Boston, MA PMSA—see Boston-Lawrence-Salem, MA-NH CMSA

### Boston-Lawrence-Salem, MA-NH CMSA

Boston, MA PMSA

Bristol County, MA (part)

Mansfield town, MA

Norton town, MA

Raynham town, MA

Essex County, MA (part)

Lynn city, MA

Lynnfield town, MA

Nahant town, MA

Saugus town, MA

Middlesex County, MA (part)

Acton town, MA

Arlington town, MA

Ashland town, MA

Ayer town, MA

Bedford town, MA

Belmont town, MA

Boxborough town, MA

Burlington town, MA

Cambridge city, MA

Carlisle town, MA

Concord town, MA



**Boston-Lawrence-Salem, MA-NH CMSA—Con.**

Boston, MA PMSA—Con.

Middlesex County, MA (part)—Con.

Everett city, MA  
 Framingham town, MA  
 Groton town, MA  
 Holliston town, MA  
 Hopkinton town, MA  
 Hudson town, MA  
 Lexington town, MA  
 Lincoln town, MA  
 Littleton town, MA  
 Malden city, MA  
 Marlborough city, MA  
 Maynard town, MA  
 Medford city, MA  
 Melrose city, MA  
 Natick town, MA  
 Newton city, MA  
 North Reading town, MA  
 Reading town, MA  
 Sherborn town, MA  
 Shirley town, MA  
 Somerville city, MA  
 Stoneham town, MA  
 Stow town, MA  
 Sudbury town, MA  
 Townsend town, MA  
 Wakefield town, MA  
 Waltham city, MA  
 Watertown town, MA  
 Wayland town, MA  
 Weston town, MA  
 Wilmington town, MA  
 Winchester town, MA  
 Woburn city, MA

Norfolk County, MA (part)

Bellingham town, MA  
 Braintree town, MA  
 Brookline town, MA  
 Canton town, MA  
 Cohasset town, MA  
 Dedham town, MA  
 Dover town, MA  
 Foxborough town, MA  
 Franklin town, MA  
 Holbrook town, MA  
 Medfield town, MA  
 Medway town, MA  
 Millis town, MA  
 Milton town, MA  
 Needham town, MA  
 Norfolk town, MA  
 Norwood town, MA  
 Quincy city, MA  
 Randolph town, MA  
 Sharon town, MA  
 Stoughton town, MA  
 Walpole town, MA  
 Wellesley town, MA  
 Westwood town, MA  
 Weymouth town, MA  
 Wrentham town, MA

Plymouth County, MA (part)

Carver town, MA  
 Duxbury town, MA  
 Hanover town, MA  
 Hanson town, MA  
 Hingham town, MA  
 Hull town, MA

**Boston-Lawrence-Salem, MA-NH CMSA—Con.**

Boston, MA PMSA—Con.

Plymouth County, MA (part)—Con.

Kingston town, MA  
 Lakeville town, MA  
 Marshfield town, MA  
 Middleborough town, MA  
 Norwell town, MA  
 Pembroke town, MA  
 Plymouth town, MA  
 Plympton town, MA  
 Rockland town, MA  
 Scituate town, MA

Suffolk County, MA (part)

Boston city, MA  
 Chelsea city, MA  
 Revere city, MA  
 Winthrop town, MA

Worcester County, MA (part)

Berlin town, MA  
 Bolton town, MA  
 Harvard town, MA  
 Hopedale town, MA  
 Lancaster town, MA  
 Mendon town, MA  
 Milford town, MA  
 Southborough town, MA  
 Upton town, MA

Brockton, MA PMSA

Bristol County, MA (part)

Easton town, MA

Norfolk County, MA (part)

Avon town, MA

Plymouth County, MA (part)

Abington town, MA  
 Bridgewater town, MA  
 Brockton city, MA  
 East Bridgewater town, MA  
 Halifax town, MA  
 West Bridgewater town, MA  
 Whitman town, MA

Lawrence-Haverhill, MA-NH PMSA

Essex County, MA (part)

Amesbury town, MA  
 Andover town, MA  
 Boxford town, MA  
 Georgetown town, MA  
 Groveland town, MA  
 Haverhill city, MA  
 Lawrence city, MA  
 Merrimac town, MA  
 Methuen town, MA  
 Newbury town, MA  
 Newburyport city, MA  
 North Andover town, MA  
 Salisbury town, MA  
 West Newbury town, MA

Rockingham County, NH (part)

Atkinson town, NH  
 Brentwood town, NH  
 Danville town, NH  
 Derry town, NH  
 East Kingston town, NH  
 Hampstead town, NH  
 Kingston town, NH  
 Newton town, NH  
 Plaistow town, NH  
 Salem town, NH  
 Sandown town, NH  
 Seabrook town, NH  
 Windham town, NH

**Boston-Lawrence-Salem, MA-NH CMSA—Con.**

Lowell, MA-NH PMSA

Middlesex County, MA (part)

Billerica town, MA  
 Chelmsford town, MA  
 Dracut town, MA  
 Dunstable town, MA  
 Lowell city, MA  
 Pepperell town, MA  
 Tewksbury town, MA  
 Tyngsborough town, MA  
 Westford town, MA

Hillsborough County, NH (part)

Pelham town, NH

Nashua, NH PMSA

Hillsborough County, NH (part)

Amherst town, NH  
 Brookline town, NH  
 Hollis town, NH  
 Hudson town, NH  
 Litchfield town, NH  
 Merrimack town, NH  
 Milford town, NH  
 Mont Vernon town, NH  
 Nashua city, NH  
 Wilton town, NH

Rockingham County, NH (part)

Londonderry town, NH

Salem-Gloucester, MA PMSA

Essex County, MA (part)

Beverly city, MA  
 Danvers town, MA  
 Essex town, MA  
 Gloucester city, MA  
 Hamilton town, MA  
 Ipswich town, MA  
 Manchester town, MA  
 Marblehead town, MA  
 Middleton town, MA  
 Peabody city, MA  
 Rockport town, MA  
 Rowley town, MA  
 Salem city, MA  
 Swampscott town, MA  
 Topsfield town, MA  
 Wenham town, MA

**Boulder-Longmont, CO PMSA—see Denver-  
 Boulder, CO CMSA**

**Bradenton, FL MSA**

Manatee County, FL

**Brazoria, TX PMSA—see Houston-Galveston-  
 Brazoria, TX CMSA**

**Bremerton, WA MSA**

Kitsap County, WA

**Bridgeport-Milford, CT PMSA—see New York-  
 Northern New Jersey-Long Island, NY-  
 NJ-CT CMSA**

**Bristol, CT PMSA—see Hartford-New Britain-  
 Middletown, CT CMSA**

**Brockton, MA PMSA—see Boston-Lawrence-  
 Salem, MA-NH CMSA**

**Brownsville-Harlingen, TX MSA**

Cameron County, TX

**Bryan-College Station, TX MSA**

Brazos County, TX

**Buffalo, NY PMSA—see Buffalo-Niagara Falls,  
 NY CMSA**



**Buffalo-Niagara Falls, NY CMSA**

Buffalo, NY PMSA  
 Erie County, NY  
 Niagara Falls, NY PMSA  
 Niagara County, NY

**Burlington, NC MSA**

Alamance County, NC

**Burlington, VT MSA**

Chittenden County, VT (part)  
 Burlington city, VT  
 Charlotte town, VT  
 Colchester town, VT  
 Essex Junction village, VT  
 Essex town balance, VT  
 Hinesburg town, VT  
 Jericho town, VT  
 Jericho village, VT  
 Milton town, VT  
 Milton village, VT  
 Richmond town, VT  
 Richmond village, VT  
 St. George town, VT  
 Shelburne town, VT  
 South Burlington city, VT  
 Williston town, VT  
 Winooski city, VT  
 Franklin County, VT (part)  
 Georgia town, VT  
 Grand Isle town, VT  
 South Hero town, VT

**Canton, OH MSA**

Carroll County, OH  
 Stark County, OH

**Casper, WY MSA**

Natrona County, WY

**Cedar Rapids, IA MSA**

Linn County, IA

**Champaign-Urbana-Rantoul, IL MSA**

Champaign County, IL

**Charleston, SC MSA**

Berkeley County, SC  
 Charleston County, SC  
 Dorchester County, SC

**Charleston, WV MSA**

Kanawha County, WV  
 Putnam County, WV

**Charlotte-Gastonia-Rock Hill, NC-SC MSA**

Cabarrus County, NC  
 Gaston County, NC  
 Lincoln County, NC  
 Mecklenburg County, NC  
 Rowan County, NC  
 Union County, NC  
 York County, SC

**Charlottesville, VA MSA**

Albemarle County, VA  
 Fluvanna County, VA  
 Greene County, VA  
 Charlottesville city, VA

**Chattanooga, TN-GA MSA**

Catoosa County, GA  
 Dade County, GA  
 Walker County, GA  
 Hamilton County, TN  
 Marion County, TN  
 Sequatchie County, TN

**Cheyenne, WY MSA**

Laramie County, WY

**Chicago, IL PMSA—see Chicago-Gary-Lake County, IL-IN-WI CMSA****Chicago-Gary-Lake County, IL-IN-WI CMSA**

Aurora-Elgin, IL PMSA  
 Kane County, IL  
 Kendall County, IL  
 Chicago, IL PMSA  
 Cook County, IL  
 Du Page County, IL  
 McHenry County, IL  
 Gary-Hammond, IN PMSA  
 Lake County, IN  
 Porter County, IN  
 Joliet, IL PMSA  
 Grundy County, IL  
 Will County, IL  
 Kenosha, WI PMSA  
 Kenosha County, WI  
 Lake County, IL PMSA  
 Lake County, IL

**Chico, CA MSA**

Butte County, CA

**Cincinnati, OH-KY-IN PMSA—see Cincinnati-Hamilton, OH-KY-IN CMSA****Cincinnati-Hamilton, OH-KY-IN CMSA****Cincinnati-Hamilton, OH-KY-IN CMSA**

Cincinnati, OH-KY-IN PMSA  
 Dearborn County, IN  
 Boone County, KY  
 Campbell County, KY  
 Kenton County, KY  
 Clermont County, OH  
 Hamilton County, OH  
 Warren County, OH  
 Hamilton-Middletown, OH PMSA  
 Butler County, OH

**Clarksville-Hopkinsville, TN-KY MSA**

Christian County, KY  
 Montgomery County, TN

**Cleveland, OH PMSA—see Cleveland-Akron-Lorain, OH CMSA****Cleveland-Akron-Lorain, OH CMSA**

Akron, OH PMSA  
 Portage County, OH  
 Summit County, OH  
 Cleveland, OH PMSA  
 Cuyahoga County, OH  
 Geauga County, OH  
 Lake County, OH  
 Medina County, OH  
 Lorain-Elyria, OH PMSA  
 Lorain County, OH

**Colorado Springs, CO MSA**

El Paso County, CO

**Columbia, MO MSA**

Boone County, MO

**Columbia, SC MSA**

Lexington County, SC  
 Richland County, SC

**Columbus, GA-AL MSA**

Russell County, AL  
 Chattahoochee County, GA  
 Muscogee County, GA

**Columbus, OH MSA**

Delaware County, OH  
 Fairfield County, OH  
 Franklin County, OH  
 Licking County, OH  
 Madison County, OH  
 Pickaway County, OH  
 Union County, OH

**Corpus Christi, TX MSA**

Nueces County, TX  
 San Patricio County, TX

**Cumberland, MD-WV MSA**

Allegany County, MD  
 Mineral County, WV

**Dallas, TX PMSA—see Dallas-Fort Worth, TX CMSA****Dallas-Fort Worth, TX CMSA**

Dallas, TX PMSA  
 Collin County, TX  
 Dallas County, TX  
 Denton County, TX  
 Ellis County, TX  
 Kaufman County, TX  
 Rockwall County, TX  
 Fort Worth-Arlington, TX PMSA  
 Johnson County, TX  
 Parker County, TX  
 Tarrant County, TX

**Danbury, CT PMSA—see New York-Northern****New Jersey-Long Island, NY-NJ-CT CMSA****Danville, VA MSA**

Pittsylvania County, VA  
 Danville city, VA

**Davenport-Rock Island-Moline, IA-IL MSA**

Henry County, IL  
 Rock Island County, IL  
 Scott County, IA

**Dayton-Springfield, OH MSA**

Clark County, OH  
 Greene County, OH  
 Miami County, OH  
 Montgomery County, OH

**Daytona Beach, FL MSA**

Volusia County, FL

**Decatur, IL MSA**

Macon County, IL

**Denver, CO PMSA—see Denver-Boulder, CO CMSA****Denver-Boulder, CO CMSA**

Boulder-Longmont, CO PMSA  
 Boulder County, CO  
 Denver, CO PMSA  
 Adams County, CO  
 Arapahoe County, CO  
 Denver County, CO  
 Douglas County, CO  
 Jefferson County, CO

**Des Moines, IA MSA**

Dallas County, IA  
 Polk County, IA  
 Warren County, IA

**Detroit, MI PMSA—see Detroit-Ann Arbor, MI CMSA****Detroit-Ann Arbor, MI CMSA**

Ann Arbor, MI PMSA  
 Washtenaw County, MI  
 Detroit, MI PMSA  
 Lapeer County, MI  
 Livingston County, MI  
 Macomb County, MI  
 Monroe County, MI  
 Oakland County, MI  
 St. Clair County, MI  
 Wayne County, MI

**Dothan, AL MSA**

Dale County, AL  
 Houston County, AL

**Dubuque, IA MSA**

Dubuque County, IA



**Duluth, MN-WI MSA**  
St. Louis County, MN  
Douglas County, WI

**Eau Claire, WI MSA**  
Chippewa County, WI  
Eau Claire County, WI

**El Paso, TX MSA**  
El Paso County, TX

**Elkhart-Goshen, IN MSA**  
Elkhart County, IN

**Elmira, NY MSA**  
Chemung County, NY

**Enid, OK MSA**  
Garfield County, OK

**Erie, PA MSA**  
Erie County, PA

**Eugene-Springfield, OR MSA**  
Lane County, OR

**Evansville, IN-KY MSA**  
Posey County, IN  
Vanderburgh County, IN  
Warrick County, IN  
Henderson County, KY

**Fall River, MA-RI PMSA—see Providence-Pawtucket-Fall River, RI-MA CMSA**

**Fargo-Moorhead, ND-MN MSA**  
Clay County, MN  
Cass County, ND

**Fayetteville, NC MSA**  
Cumberland County, NC

**Fayetteville-Springdale, AR MSA**  
Washington County, AR

**Fitchburg-Leominster, MA MSA**  
Middlesex County, MA (part)  
Ashby town, MA  
Worcester County, MA (part)  
Ashburnham town, MA  
Fitchburg city, MA  
Leominster city, MA  
Lunenburg town, MA  
Westminster town, MA

**Flint, MI MSA**  
Genesee County, MI

**Florence, AL MSA**  
Colbert County, AL  
Lauderdale County, AL

**Florence, SC MSA**  
Florence County, SC

**Fort Collins-Loveland, CO MSA**  
Larimer County, CO

**Fort Lauderdale-Hollywood-Pompano Beach, FL PMSA—see Miami-Fort Lauderdale, FL CMSA**

**Fort Myers-Cape Coral, FL MSA**  
Lee County, FL

**Fort Pierce, FL MSA**  
Martin County, FL  
St. Lucie County, FL

**Fort Smith, AR-OK MSA**  
Crawford County, AR  
Sebastian County, AR  
Sequoyah County, OK

**Fort Walton Beach, FL MSA**  
Okaloosa County, FL

**Fort Wayne, IN MSA**  
Allen County, IN  
De Kalb County, IN  
Whitley County, IN

**Fort Worth-Arlington, TX PMSA—see Dallas-Fort Worth, TX CMSA**

**Fresno, CA MSA**  
Fresno County, CA

**Gadsden, AL MSA**  
Etowah County, AL

**Gainesville, FL MSA**  
Alachua County, FL  
Bradford County, FL

**Galveston-Texas City, TX PMSA—see Houston-Galveston-Brazoria, TX CMSA**

**Gary-Hammond, IN PMSA—see Chicago-Gary-Lake County, IL-IN-WI CMSA**

**Glens Falls, NY MSA**  
Warren County, NY  
Washington County, NY

**Grand Forks, ND MSA**  
Grand Forks County, ND

**Grand Rapids, MI MSA**  
Kent County, MI  
Ottawa County, MI

**Great Falls, MT MSA**  
Cascade County, MT

**Greeley, CO MSA**  
Weld County, CO

**Green Bay, WI MSA**  
Brown County, WI

**Greensboro-Winston-Salem-High Point, NC MSA**  
Davidson County, NC  
Davie County, NC  
Forsyth County, NC  
Guilford County, NC  
Randolph County, NC  
Stokes County, NC  
Yadkin County, NC

**Greenville-Spartanburg, SC MSA**  
Greenville County, SC  
Pickens County, SC  
Spartanburg County, SC

**Hagerstown, MD MSA**  
Washington County, MD

**Hamilton-Middletown, OH PMSA—see Cincinnati-Hamilton, OH-KY-IN CMSA**

**Harrisburg-Lebanon-Carlisle, PA MSA**  
Cumberland County, PA  
Dauphin County, PA  
Lebanon County, PA  
Perry County, PA

**Hartford, CT PMSA—see Hartford-New Britain-Middletown, CT CMSA**

**Hartford-New Britain-Middletown, CT CMSA**  
Bristol, CT PMSA  
Hartford County, CT (part)  
Bristol city, CT  
Burlington town, CT  
Litchfield County, CT (part)  
Plymouth town, CT  
Hartford, CT PMSA  
Hartford County, CT (part)  
Avon town, CT  
Bloomfield town, CT  
Canton town, CT  
East Granby town, CT  
East Hartford town, CT  
East Windsor town, CT  
Enfield town, CT  
Farmington town, CT  
Glastonbury town, CT  
Granby town, CT  
Hartford city, CT  
Manchester town, CT  
Marlborough town, CT

**Hartford-New Britain-Middletown, CT CMSA—Con.**  
Hartford, CT PMSA—Con.  
Hartford County, CT (part)—Con.  
Newington town, CT  
Rocky Hill town, CT  
Simsbury town, CT  
South Windsor town, CT  
Suffield town, CT  
West Hartford town, CT  
Wethersfield town, CT  
Windsor Locks town, CT  
Windsor town, CT  
Litchfield County, CT (part)  
Barkhamsted town, CT  
New Hartford town, CT  
East Haddam town, CT  
New London County, CT (part)  
Colchester borough, CT  
Colchester town balance, CT  
Tolland County, CT (part)  
Andover town, CT  
Bolton town, CT  
Columbia town, CT  
Coventry town, CT  
Ellington town, CT  
Hebron town, CT  
Somers town, CT  
Stafford Springs borough, CT  
Stafford town balance, CT  
Tolland town, CT  
Vernon town, CT  
Willington town, CT  
Middletown, CT PMSA  
Middlesex County, CT (part)  
Cromwell town, CT  
Durham town, CT  
East Hampton town, CT  
Haddam town, CT  
Middlefield town, CT  
Middletown city, CT  
Portland town, CT  
New Britain, CT PMSA  
Hartford County, CT (part)  
Berlin town, CT  
New Britain city, CT  
Plainville town, CT  
Southington town, CT

**Hickory, NC MSA**  
Alexander County, NC  
Burke County, NC  
Catawba County, NC

**Honolulu, HI MSA**  
Honolulu County, HI

**Houma-Thibodaux, LA MSA**  
Lafourche Parish, LA  
Terrebonne Parish, LA

**Houston, TX PMSA—see Houston-Galveston-Brazoria, TX CMSA**

**Houston-Galveston-Brazoria, TX CMSA**  
Brazoria, TX PMSA  
Brazoria County, TX  
Galveston-Texas City, TX PMSA  
Galveston County, TX  
Houston, TX PMSA  
Fort Bend County, TX  
Harris County, TX  
Liberty County, TX  
Montgomery County, TX  
Waller County, TX



**Huntington-Ashland, WV-KY-OH MSA**

Boyd County, KY  
 Carter County, KY  
 Greenup County, KY  
 Lawrence County, OH  
 Cabell County, WV  
 Wayne County, WV

**Huntsville, AL MSA**

Madison County, AL

**Indianapolis, IN MSA**

Boone County, IN  
 Hamilton County, IN  
 Hancock County, IN  
 Hendricks County, IN  
 Johnson County, IN  
 Marion County, IN  
 Morgan County, IN  
 Shelby County, IN

**Iowa City, IA MSA**

Johnson County, IA

**Jackson, MI MSA**

Jackson County, MI

**Jackson, MS MSA**

Hinds County, MS  
 Madison County, MS  
 Rankin County, MS

**Jackson, TN MSA**

Madison County, TN

**Jacksonville, FL MSA**

Clay County, FL  
 Duval County, FL  
 Nassau County, FL  
 St. Johns County, FL

**Jacksonville, NC MSA**

Onslow County, NC

**Janesville-Beloit, WI MSA**

Rock County, WI

**Jersey City, NJ PMSA—see New York-Northern****New Jersey-Long Island, NY-NJ-CT CMSA****Johnson City-Kingsport-Bristol, TN-VA MSA**

Carter County, TN  
 Hawkins County, TN  
 Sullivan County, TN  
 Unicoi County, TN  
 Washington County, TN  
 Scott County, VA  
 Washington County, VA  
 Bristol city, VA

**Johnstown, PA MSA**

Cambria County, PA  
 Somerset County, PA

**Joliet, IL PMSA—see Chicago-Gary-Lake  
County, IL-IN-WI CMSA****Joplin, MO MSA**

Jasper County, MO  
 Newton County, MO

**Kalamazoo, MI MSA**

Kalamazoo County, MI

**Kankakee, IL MSA**

Kankakee County, IL

**Kansas City, MO-KS MSA**

Johnson County, KS  
 Leavenworth County, KS  
 Miami County, KS  
 Wyandotte County, KS  
 Cass County, MO  
 Clay County, MO  
 Jackson County, MO  
 Lafayette County, MO  
 Platte County, MO  
 Ray County, MO

**Kenosha, WI PMSA—see Chicago-Gary-Lake  
County, IL-IN-WI CMSA****Killeen-Temple, TX MSA**

Bell County, TX  
 Coryell County, TX

**Knoxville, TN MSA**

Anderson County, TN  
 Blount County, TN  
 Grainger County, TN  
 Jefferson County, TN  
 Knox County, TN  
 Sevier County, TN  
 Union County, TN

**Kokomo, IN MSA**

Howard County, IN  
 Tipton County, IN

**La Crosse, WI MSA**

La Crosse County, WI

**Lafayette, LA MSA**

Lafayette Parish, LA  
 St. Martin Parish, LA

**Lafayette-West Lafayette, IN MSA**

Tippecanoe County, IN

**Lake Charles, LA MSA**

Calcasieu Parish, LA

**Lake County, IL PMSA—see Chicago-Gary-  
Lake County, IL-IN-WI CMSA****Lakeland-Winter Haven, FL MSA**

Polk County, FL

**Lancaster, PA MSA**

Lancaster County, PA

**Lansing-East Lansing, MI MSA**

Clinton County, MI  
 Eaton County, MI  
 Ingham County, MI

**Laredo, TX MSA**

Webb County, TX

**Las Cruces, NM MSA**

Dona Ana County, NM

**Las Vegas, NV MSA**

Clark County, NV

**Lawrence, KS MSA**

Douglas County, KS

**Lawrence-Haverhill, MA-NH PMSA—see Boston-****Lawrence-Salem, MA-NH CMSA****Lawton, OK MSA**

Comanche County, OK

**Lewiston-Auburn, ME MSA**

Androscoggin County, ME (part)  
 Auburn city, ME  
 Greene town, ME  
 Lewiston city, ME  
 Lisbon town, ME  
 Mechanic Falls town, ME  
 Poland town, ME  
 Sabattus town, ME

**Lexington-Fayette, KY MSA**

Bourbon County, KY  
 Clark County, KY  
 Fayette County, KY  
 Jessamine County, KY  
 Scott County, KY  
 Woodford County, KY

**Lima, OH MSA**

Allen County, OH  
 Auglaize County, OH

**Lincoln, NE MSA**

Lancaster County, NE

**Little Rock-North Little Rock, AR MSA**

Faulkner County, AR  
 Lonoke County, AR  
 Pulaski County, AR  
 Saline County, AR

**Longview-Marshall, TX MSA**

Gregg County, TX  
 Harrison County, TX

**Lorain-Elyria, OH PMSA—see Cleveland-  
Akron-Lorain, OH CMSA****Los Angeles-Anaheim-Riverside, CA CMSA**

Anaheim-Santa Ana, CA PMSA  
 Orange County, CA  
 Los Angeles-Long Beach, CA PMSA  
 Los Angeles County, CA  
 Oxnard-Ventura, CA PMSA  
 Ventura County, CA  
 Riverside-San Bernardino, CA PMSA  
 Riverside County, CA  
 San Bernardino County, CA

**Los Angeles-Long Beach, CA PMSA—see  
Los Angeles-Anaheim-Riverside, CA CMSA****Louisville, KY-IN MSA**

Clark County, IN  
 Floyd County, IN  
 Harrison County, IN  
 Bullitt County, KY  
 Jefferson County, KY  
 Oldham County, KY  
 Shelby County, KY

**Lowell, MA-NH PMSA—see Boston-Lawrence-  
Salem, MA-NH CMSA****Lubbock, TX MSA**

Lubbock County, TX

**Lynchburg, VA MSA**

Amherst County, VA  
 Campbell County, VA  
 Lynchburg city, VA

**Macon-Warner Robins, GA MSA**

Bibb County, GA  
 Houston County, GA  
 Jones County, GA  
 Peach County, GA

**Madison, WI MSA**

Dane County, WI

**Manchester, NH MSA**

Hillsborough County, NH (part)  
 Bedford town, NH  
 Goffstown town, NH  
 Manchester city, NH  
 Merrimack County, NH (part)  
 Allenstown town, NH  
 Hooksett town, NH  
 Auburn town, NH  
 Candia town, NH

**Mansfield, OH MSA**

Richland County, OH

**McAllen-Edinburg-Mission, TX MSA**

Hidalgo County, TX

**Medford, OR MSA**

Jackson County, OR

**Melbourne-Titusville-Palm Bay, FL MSA**

Brevard County, FL

**Memphis, TN-AR-MS MSA**

Crittenden County, AR  
 De Soto County, MS  
 Shelby County, TN  
 Tipton County, TN

**Merced, CA MSA**

Merced County, CA

**Miami-Fort Lauderdale, FL CMSA**

Fort Lauderdale-Hollywood-Pompano  
 Beach, FL PMSA  
 Broward County, FL  
 Miami-Hialeah, FL PMSA  
 Dade County, FL



**Miami-Hialeah, FL PMSA**—see **Miami-Fort Lauderdale, FL CMSA**

**Middlesex-Somerset-Hunterdon, NJ PMSA**  
—see **New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA**

**Middletown, CT PMSA**—see **Hartford-New Britain-Middletown, CT CMSA**

**Midland, TX MSA**  
Midland County, TX

**Milwaukee, WI PMSA**—see **Milwaukee-Racine, WI CMSA**

**Milwaukee-Racine, WI CMSA**  
Milwaukee, WI PMSA  
Milwaukee County, WI  
Ozaukee County, WI  
Washington County, WI  
Waukesha County, WI  
Racine, WI PMSA  
Racine County, WI

**Minneapolis-St. Paul, MN-WI MSA**  
Anoka County, MN  
Carver County, MN  
Chisago County, MN  
Dakota County, MN  
Hennepin County, MN  
Isanti County, MN  
Ramsey County, MN  
Scott County, MN  
Washington County, MN  
Wright County, MN  
St. Croix County, WI

**Mobile, AL MSA**  
Baldwin County, AL  
Mobile County, AL

**Modesto, CA MSA**  
Stanislaus County, CA

**Monmouth-Ocean, NJ PMSA**—see **New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA**

**Monroe, LA MSA**  
Ouachita Parish, LA

**Montgomery, AL MSA**  
Autauga County, AL  
Elmore County, AL  
Montgomery County, AL

**Muncie, IN MSA**  
Delaware County, IN

**Muskegon, MI MSA**  
Muskegon County, MI

**Naples, FL MSA**  
Collier County, FL

**Nashua, NH PMSA**—see **Boston-Lawrence-Salem, MA-NH CMSA**

**Nashville, TN MSA**  
Cheatham County, TN  
Davidson County, TN  
Dickson County, TN  
Robertson County, TN  
Rutherford County, TN  
Sumner County, TN  
Williamson County, TN  
Wilson County, TN

**Nassau-Suffolk, NY PMSA**—see **New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA**

**New Bedford, MA MSA**  
Bristol County, MA (part)  
Acushnet town, MA  
Dartmouth town, MA  
Fairhaven town, MA  
Freetown town, MA  
New Bedford city, MA

**New Bedford, MA MSA**—Con.  
Plymouth County, MA (part)  
Marion town, MA  
Mattapoisett town, MA  
Rochester town, MA

**New Britain, CT PMSA**—see **Hartford-New Britain-Middletown, CT CMSA**

**New Haven-Meriden, CT MSA**  
Middlesex County, CT (part)  
Clinton town, CT  
Killingworth town, CT  
New Haven County, CT (part)  
Bethany town, CT  
Branford town, CT  
Cheshire town, CT  
East Haven town, CT  
Guilford town, CT  
Hamden town, CT  
Madison town, CT  
Meriden city, CT  
New Haven city, CT  
North Branford town, CT  
North Haven town, CT  
Orange town, CT  
Wallingford town, CT  
West Haven city, CT  
Woodbridge town, CT

**New London-Norwich, CT-RI MSA**  
New London County, CT (part)  
Bozrah town, CT  
East Lyme town, CT  
Franklin town, CT  
Griswold town balance, CT  
Groton city, CT  
Groton town balance, CT  
Jewett City borough, CT  
Ledyard town, CT  
Lisbon town, CT  
Montville town, CT  
New London city, CT  
North Stonington town, CT  
Norwich city, CT  
Old Lyme town, CT  
Preston town, CT  
Salem town, CT  
Sprague town, CT  
Stonington town, CT  
Waterford town, CT  
Windham County, CT (part)  
Canterbury town, CT  
Washington County, RI (part)  
Hopkinton town, RI  
Westerly town, RI

**New Orleans, LA MSA**  
Jefferson Parish, LA  
Orleans Parish, LA  
St. Bernard Parish, LA  
St. Charles Parish, LA  
St. John the Baptist Parish, LA  
St. Tammany Parish, LA

**New York, NY PMSA**—see **New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA**

**New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA**  
Bergen-Passaic, NJ PMSA  
Bergen County, NJ  
Passaic County, NJ  
Bridgeport-Milford, CT PMSA  
Fairfield County, CT (part)  
Bridgeport city, CT  
Easton town, CT  
Fairfield town, CT  
Monroe town, CT

**New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA**—Con.  
Bridgeport-Milford, CT PMSA—Con.  
Fairfield County, CT (part)—Con.  
Shelton city, CT  
Stratford town, CT  
Trumbull town, CT  
New Haven County, CT (part)  
Ansonia city, CT  
Beacon Falls town, CT  
Derby city, CT  
Milford city, CT  
Milford town balance, CT  
Oxford town, CT  
Seymour town, CT  
Woodmont borough, CT  
Danbury, CT PMSA  
Fairfield County, CT (part)  
Bethel town, CT  
Brookfield town, CT  
Danbury city, CT  
New Fairfield town, CT  
Newtown town, CT  
Redding town, CT  
Ridgefield town, CT  
Sherman town, CT  
Litchfield County, CT (part)  
Bridgewater town, CT  
New Milford town, CT  
Jersey City, NJ PMSA  
Hudson County, NJ  
Middlesex-Somerset-Hunterdon, NJ PMSA  
Hunterdon County, NJ  
Middlesex County, NJ  
Somerset County, NJ  
Monmouth-Ocean, NJ PMSA  
Monmouth County, NJ  
Ocean County, NJ  
Nassau-Suffolk, NY PMSA  
Nassau County, NY  
Suffolk County, NY  
New York, NY PMSA  
Bronx County, NY  
Kings County, NY  
New York County, NY  
Putnam County, NY  
Queens County, NY  
Richmond County, NY  
Rockland County, NY  
Westchester County, NY  
Newark, NJ PMSA  
Essex County, NJ  
Morris County, NJ  
Sussex County, NJ  
Union County, NJ  
Norwalk, CT PMSA  
Fairfield County, CT (part)  
Norwalk city, CT  
Weston town, CT  
Westport town, CT  
Wilton town, CT  
Orange County, NY PMSA  
Orange County, NY  
Stamford, CT PMSA  
Fairfield County, CT (part)  
Darien town, CT  
Greenwich town, CT  
New Canaan town, CT  
Stamford city, CT



**Newark, NJ PMSA—see New York-Northern  
New Jersey-Long Island, NY-NJ-CT CMSA**  
**Niagara Falls, NY PMSA—see Buffalo-Niagara  
Falls, NY CMSA**

**Norfolk-Virginia Beach-Newport News, VA  
MSA**

Gloucester County, VA  
James City County, VA  
York County, VA  
Chesapeake city, VA  
Hampton city, VA  
Newport News city, VA  
Norfolk city, VA  
Poquoson city, VA  
Portsmouth city, VA  
Suffolk city, VA  
Virginia Beach city, VA  
Williamsburg city, VA

**Norwalk, CT PMSA—see New York-Northern  
New Jersey-Long Island, NY-NJ-CT CMSA**

**Oakland, CA PMSA—see San Francisco-  
Oakland-San Jose, CA CMSA**

**Ocala, FL MSA**

Marion County, FL

**Odessa, TX MSA**

Ector County, TX

**Oklahoma City, OK MSA**

Canadian County, OK  
Cleveland County, OK  
Logan County, OK  
McClain County, OK  
Oklahoma County, OK  
Pottawatomie County, OK

**Olympia, WA MSA**

Thurston County, WA

**Omaha, NE-IA MSA**

Pottawattamie County, IA  
Douglas County, NE  
Sarpy County, NE  
Washington County, NE

**Orange County, NY PMSA—see New York-Northern  
New Jersey-Long Island, NY-NJ-CT CMSA**

**Orlando, FL MSA**

Orange County, FL  
Osceola County, FL  
Seminole County, FL

**Owensboro, KY MSA**

Daviess County, KY

**Oxnard-Ventura, CA PMSA—see Los Angeles-  
Anaheim-Riverside, CA CMSA**

**Panama City, FL MSA**

Bay County, FL

**Parkersburg-Marietta, WV-OH MSA**

Washington County, OH  
Wood County, WV

**Pascagoula, MS MSA**

Jackson County, MS

**Pawtucket-Woonsocket-Attleboro, RI-MA  
PMSA—see Providence-Pawtucket-Fall  
River, RI-MA CMSA**

**Pensacola, FL MSA**

Escambia County, FL  
Santa Rosa County, FL

**Peoria, IL MSA**

Peoria County, IL  
Tazewell County, IL  
Woodford County, IL

**Philadelphia, PA-NJ PMSA—see Philadelphia-  
Wilmington-Trenton, PA-NJ-DE-MD CMSA**

**Philadelphia-Wilmington-Trenton, PA-NJ-DE-  
MD CMSA**

Philadelphia, PA-NJ PMSA

Burlington County, NJ

Camden County, NJ

Gloucester County, NJ

Bucks County, PA

Chester County, PA

Delaware County, PA

Montgomery County, PA

Philadelphia County, PA

Trenton, NJ PMSA

Mercer County, NJ

Vineland-Millville-Bridgeton, NJ PMSA

Cumberland County, NJ

Wilmington, DE-NJ-MD PMSA

New Castle County, DE

Cecil County, MD

Salem County, NJ

**Phoenix, AZ MSA**

Maricopa County, AZ

**Pine Bluff, AR MSA**

Jefferson County, AR

**Pittsburgh, PA PMSA—see Pittsburgh-Beaver  
Valley, PA CMSA**

**Pittsburgh-Beaver Valley, PA CMSA**

Beaver County, PA PMSA

Beaver County, PA

Pittsburgh, PA PMSA

Allegheny County, PA

Fayette County, PA

Washington County, PA

Westmoreland County, PA

**Pittsfield, MA MSA**

Berkshire County, MA (part)

Cheshire town, MA

Dalton town, MA

Hinsdale town, MA

Lanesborough town, MA

Lee town, MA

Lenox town, MA

Pittsfield city, MA

Richmond town, MA

Stockbridge town, MA

**Portland, ME MSA**

Cumberland County, ME (part)

Cape Elizabeth town, ME

Cumberland town, ME

Falmouth town, ME

Freeport town, ME

Gorham town, ME

Gray town, ME

North Yarmouth town, ME

Portland city, ME

Raymond town, ME

Scarborough town, ME

South Portland city, ME

Standish town, ME

Westbrook city, ME

Windham town, ME

Yarmouth town, ME

York County, ME (part)

Buxton town, ME

Hollis town, ME

Old Orchard Beach town, ME

**Portland, OR PMSA—see Portland-Vancouver,  
OR-WA CMSA**

**Portland-Vancouver, OR-WA CMSA**

Portland, OR PMSA

Clackamas County, OR

Multnomah County, OR

Washington County, OR

Yamhill County, OR

Vancouver, WA PMSA

Clark County, WA

**Portsmouth-Dover-Rochester, NH-ME MSA**

York County, ME (part)

Berwick town, ME

Eliot town, ME

Kittery town, ME

North Berwick town, ME

Ogunquit town, ME

South Berwick town, ME

Wells town, ME

York town, ME

Rockingham County, NH (part)

Exeter town, NH

Greenland town, NH

Hampton town, NH

New Castle town, NH

Newfields town, NH

Newington town, NH

Newmarket town, NH

North Hampton town, NH

Portsmouth city, NH

Rye town, NH

Stratham town, NH

Strafford County, NH (part)

Barrington town, NH

Dover city, NH

Durham town, NH

Farmington town, NH

Lee town, NH

Madbury town, NH

Milton town, NH

Rochester city, NH

Rollinsford town, NH

Somersworth city, NH

**Poughkeepsie, NY MSA**

Dutchess County, NY

**Providence, RI PMSA—see Providence-  
Pawtucket-Fall River, RI-MA CMSA**

**Providence-Pawtucket-Fall River, RI-MA CMSA**

Fall River, MA-RI PMSA

Bristol County, MA (part)

Fall River city, MA

Somerset town, MA

Swansea town, MA

Westport town, MA

Newport County, RI (part)

Little Compton town, RI

Tiverton town, RI

Pawtucket-Woonsocket-Attleboro, RI-MA PMSA

Bristol County, MA (part)

Attleboro city, MA

North Attleborough town, MA

Rehoboth town, MA

Seekonk town, MA

Norfolk County, MA (part)

Plainville town, MA

Worcester County, MA (part)

Blackstone town, MA

Millville town, MA

Providence County, RI (part)

Burrillville town, RI

Central Falls city, RI

Cumberland town, RI

Lincoln town, RI



**Providence-Pawtucket-Fall River, RI-MA CMSA—Con.**

Pawtucket-Woonsocket-Attleboro, RI-MA PMSA—Con.

Providence County, RI (part)—Con.

North Smithfield town, RI

Pawtucket city, RI

Smithfield town, RI

Woonsocket city, RI

Providence, RI PMSA

Bristol County, RI (part)

Barrington town, RI

Bristol town, RI

Warren town, RI

Kent County, RI (part)

Coventry town, RI

East Greenwich town, RI

Warwick city, RI

West Warwick town, RI

Newport County, RI (part)

Jamestown town, RI

Providence County, RI (part)

Cranston city, RI

East Providence city, RI

Foster town, RI

Glocester town, RI

Johnston town, RI

North Providence town, RI

Providence city, RI

Scituate town, RI

Washington County, RI (part)

Exeter town, RI

Narragansett town, RI

North Kingstown town, RI

Richmond town, RI

South Kingstown town, RI

**Provo-Orem, UT MSA**

Utah County, UT

**Pueblo, CO MSA**

Pueblo County, CO

**Racine, WI PMSA—see Milwaukee-Racine, WI CMSA**

**Raleigh-Durham, NC MSA**

Durham County, NC

Franklin County, NC

Orange County, NC

Wake County, NC

**Rapid City, SD MSA**

Pennington County, SD

**Reading, PA MSA**

Berks County, PA

**Redding, CA MSA**

Shasta County, CA

**Reno, NV MSA**

Washoe County, NV

**Richland-Kennewick-Pasco, WA MSA**

Benton County, WA

Franklin County, WA

**Richmond-Petersburg, VA MSA**

Charles City County, VA

Chesterfield County, VA

Dinwiddie County, VA

Goochland County, VA

Hanover County, VA

Henrico County, VA

New Kent County, VA

Powhatan County, VA

Prince George County, VA

Colonial Heights city, VA

Hopewell city, VA

Petersburg city, VA

Richmond city, VA

**Riverside-San Bernardino, CA PMSA—see Los Angeles-Anaheim-Riverside, CA CMSA**

**Roanoke, VA MSA**

Botetourt County, VA

Roanoke County, VA

Roanoke city, VA

Salem city, VA

**Rochester, MN MSA**

Olmsted County, MN

**Rochester, NY MSA**

Livingston County, NY

Monroe County, NY

Ontario County, NY

Orleans County, NY

Wayne County, NY

**Rockford, IL MSA**

Boone County, IL

Winnebago County, IL

**Sacramento, CA MSA**

El Dorado County, CA

Placer County, CA

Sacramento County, CA

Yolo County, CA

**Saginaw-Bay City-Midland, MI MSA**

Bay County, MI

Midland County, MI

Saginaw County, MI

**St. Cloud, MN MSA**

Benton County, MN

Sherburne County, MN

Stearns County, MN

**St. Joseph, MO MSA**

Buchanan County, MO

**St. Louis, MO-IL MSA**

Clinton County, IL

Jersey County, IL

Madison County, IL

Monroe County, IL

St. Clair County, IL

Franklin County, MO

Jefferson County, MO

St. Charles County, MO

St. Louis County, MO

St. Louis city, MO

**Salem, OR MSA**

Marion County, OR

Polk County, OR

**Salem-Gloucester, MA PMSA—see Boston-Lawrence-Salem, MA-NH CMSA**

**Salinas-Seaside-Monterey, CA MSA**

Monterey County, CA

**Salt Lake City-Ogden, UT MSA**

Davis County, UT

Salt Lake County, UT

Weber County, UT

**San Angelo, TX MSA**

Tom Green County, TX

**San Antonio, TX MSA**

Bexar County, TX

Comal County, TX

Guadalupe County, TX

**San Diego, CA MSA**

San Diego County, CA

**San Francisco, CA PMSA—see San Francisco-Oakland-San Jose, CA CMSA**

**San Francisco-Oakland-San Jose, CA CMSA**

Oakland, CA PMSA

Alameda County, CA

Contra Costa County, CA

**San Francisco-Oakland-San Jose, CA CMSA—Con.**

San Francisco, CA PMSA

Marin County, CA

San Francisco County, CA

San Mateo County, CA

San Jose, CA PMSA

Santa Clara County, CA

Santa Cruz, CA PMSA

Santa Cruz County, CA

Santa Rosa-Petaluma, CA PMSA

Sonoma County, CA

Vallejo-Fairfield-Napa, CA PMSA

Napa County, CA

Solano County, CA

**San Jose, CA PMSA—see San Francisco-Oakland-San Jose, CA CMSA**

**Santa Barbara-Santa Maria-Lompoc, CA MSA**

Santa Barbara County, CA

**Santa Cruz, CA PMSA—see San Francisco-Oakland-San Jose, CA CMSA**

**Santa Fe, NM MSA**

Los Alamos County, NM

Santa Fe County, NM

**Santa Rosa-Petaluma, CA PMSA—see San Francisco-Oakland-San Jose, CA CMSA**

**Sarasota, FL MSA**

Sarasota County, FL

**Savannah, GA MSA**

Chatham County, GA

Effingham County, GA

**Scranton-Wilkes-Barre, PA MSA**

Columbia County, PA

Lackawanna County, PA

Luzerne County, PA

Monroe County, PA

Wyoming County, PA

**Seattle, WA PMSA—see Seattle-Tacoma, WA CMSA**

**Seattle-Tacoma, WA CMSA**

Seattle, WA PMSA

King County, WA

Snohomish County, WA

Tacoma, WA PMSA

Pierce County, WA

**Sharon, PA MSA**

Mercer County, PA

**Sheboygan, WI MSA**

Sheboygan County, WI

**Sherman-Denison, TX MSA**

Grayson County, TX

**Shreveport, LA MSA**

Bossier Parish, LA

Caddo Parish, LA

**Sioux City, IA-NE MSA**

Woodbury County, IA

Dakota County, NE

**Sioux Falls, SD MSA**

Minnehaha County, SD

**South Bend-Mishawaka, IN MSA**

St. Joseph County, IN

**Spokane, WA MSA**

Spokane County, WA

**Springfield, IL MSA**

Menard County, IL

Sangamon County, IL

**Springfield, MO MSA**

Christian County, MO

Greene County, MO



**Springfield, MA MSA**

Hampden County, MA (part)  
 Agawam town, MA  
 Chicopee city, MA  
 East Longmeadow town, MA  
 Hampden town, MA  
 Holyoke city, MA  
 Longmeadow town, MA  
 Ludlow town, MA  
 Monson town, MA  
 Montgomery town, MA  
 Palmer town, MA  
 Russell town, MA  
 Southwick town, MA  
 Springfield city, MA  
 Westfield city, MA  
 West Springfield town, MA  
 Wilbraham town, MA  
 Hampshire County, MA (part)  
 Belchertown town, MA  
 Easthampton town, MA  
 Granby town, MA  
 Huntington town, MA  
 Northampton city, MA  
 Southampton town, MA  
 South Hadley town, MA

**Stamford, CT PMSA—see New York-Northern****New Jersey-Long Island, NY-NJ-CT CMSA****State College, PA MSA**

Centre County, PA

**Steubenville-Weirton, OH-WV MSA**

Jefferson County, OH  
 Brooke County, WV  
 Hancock County, WV

**Stockton, CA MSA**

San Joaquin County, CA

**Syracuse, NY MSA**

Madison County, NY  
 Onondaga County, NY  
 Oswego County, NY

**Tacoma, WA PMSA—see Seattle-Tacoma, WA CMSA****Tallahassee, FL MSA**

Gadsden County, FL  
 Leon County, FL

**Tampa-St. Petersburg-Clearwater, FL MSA**

Hernando County, FL  
 Hillsborough County, FL  
 Pasco County, FL  
 Pinellas County, FL

**Terre Haute, IN MSA**

Clay County, IN  
 Vigo County, IN

**Texarkana, TX-Texarkana, AR MSA**

Miller County, AR  
 Bowie County, TX

**Toledo, OH MSA**

Fulton County, OH  
 Lucas County, OH  
 Wood County, OH

**Topeka, KS MSA**

Shawnee County, KS

**Trenton, NJ PMSA—see Philadelphia-Wilmington-****Trenton, PA-NJ-DE-MD CMSA****Tucson, AZ MSA**

Pima County, AZ

**Tulsa, OK MSA**

Creek County, OK  
 Osage County, OK  
 Rogers County, OK  
 Tulsa County, OK  
 Wagoner County, OK

**Tuscaloosa, AL MSA**

Tuscaloosa County, AL

**Tyler, TX MSA**

Smith County, TX

**Utica-Rome, NY MSA**

Herkimer County, NY  
 Oneida County, NY

**Vallejo-Fairfield-Napa, CA PMSA—see San****Francisco-Oakland-San Jose, CA CMSA****Vancouver, WA PMSA—see Portland-****Vancouver, OR-WA CMSA****Victoria, TX MSA**

Victoria County, TX

**Vineland-Millville-Bridgeton, NJ PMSA—see****Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD CMSA****Visalia-Tulare-Porterville, CA MSA**

Tulare County, CA

**Waco, TX MSA**

McLennan County, TX

**Washington, DC-MD-VA MSA**

District of Columbia, DC  
 Calvert County, MD  
 Charles County, MD  
 Frederick County, MD  
 Montgomery County, MD  
 Prince George's County, MD  
 Arlington County, VA  
 Fairfax County, VA  
 Loudoun County, VA  
 Prince William County, VA  
 Stafford County, VA  
 Alexandria city, VA  
 Fairfax city, VA  
 Falls Church city, VA  
 Manassas city, VA  
 Manassas Park city, VA

**Waterbury, CT MSA**

Litchfield County, CT (part)  
 Bethlehem town, CT  
 Thomaston town, CT  
 Watertown town, CT  
 Woodbury town, CT  
 New Haven County, CT (part)  
 Middlebury town, CT  
 Naugatuck borough, CT  
 Prospect town, CT  
 Southbury town, CT  
 Waterbury city, CT  
 Wolcott town, CT

**Waterloo-Cedar Falls, IA MSA**

Black Hawk County, IA  
 Bremer County, IA

**Wausau, WI MSA**

Marathon County, WI

**West Palm Beach-Boca Raton-Delray Beach, FL MSA**

Palm Beach County, FL

**Wheeling, WV-OH MSA**

Belmont County, OH  
 Marshall County, WV  
 Ohio County, WV

**Wichita, KS MSA**

Butler County, KS  
 Harvey County, KS  
 Sedgwick County, KS

**Wichita Falls, TX MSA**

Wichita County, TX

**Williamsport, PA MSA**

Lycoming County, PA

**Wilmington, DE-NJ-MD PMSA—see Philadelphia-****Wilmington-Trenton, PA-NJ-DE-MD CMSA****Wilmington, NC MSA**

New Hanover County, NC

**Worcester, MA MSA**

Worcester County, MA (part)  
 Auburn town, MA  
 Barre town, MA  
 Boylston town, MA  
 Brookfield town, MA  
 Charlton town, MA  
 Clinton town, MA  
 Douglas town, MA  
 Dudley town, MA  
 East Brookfield town, MA  
 Grafton town, MA  
 Holden town, MA  
 Leicester town, MA  
 Millbury town, MA  
 Northborough town, MA  
 Northbridge town, MA  
 North Brookfield town, MA  
 Oxford town, MA  
 Paxton town, MA  
 Princeton town, MA  
 Rutland town, MA  
 Shrewsbury town, MA  
 Spencer town, MA  
 Sterling town, MA  
 Sutton town, MA  
 Uxbridge town, MA  
 Webster town, MA  
 Westborough town, MA  
 West Boylston town, MA  
 Worcester city, MA

**Yakima, WA MSA**

Yakima County, WA

**York, PA MSA**

Adams County, PA  
 York County, PA

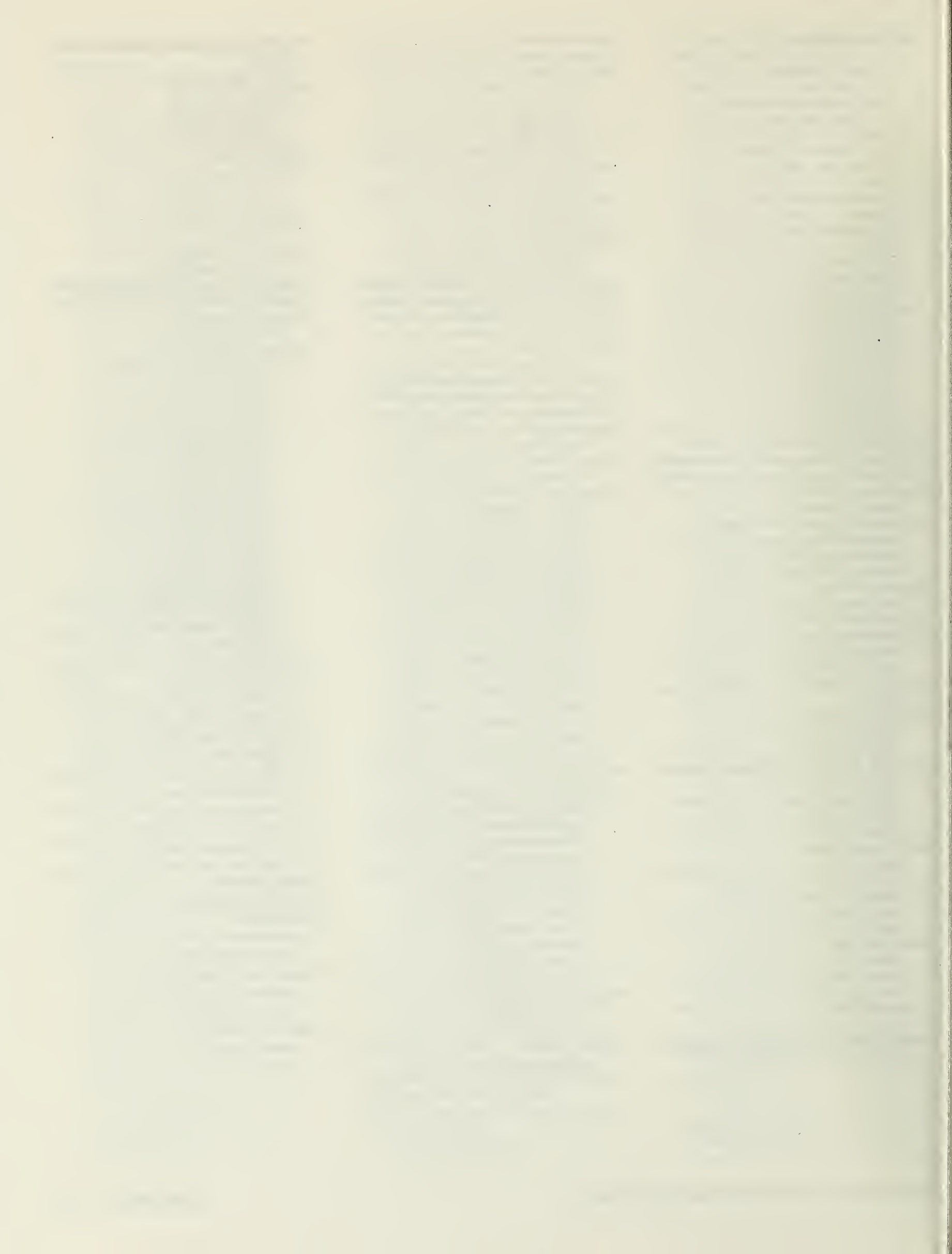
**Youngstown-Warren, OH MSA**

Mahoning County, OH  
 Trumbull County, OH

**Yuba City, CA MSA**

Sutter County, CA  
 Yuba County, CA



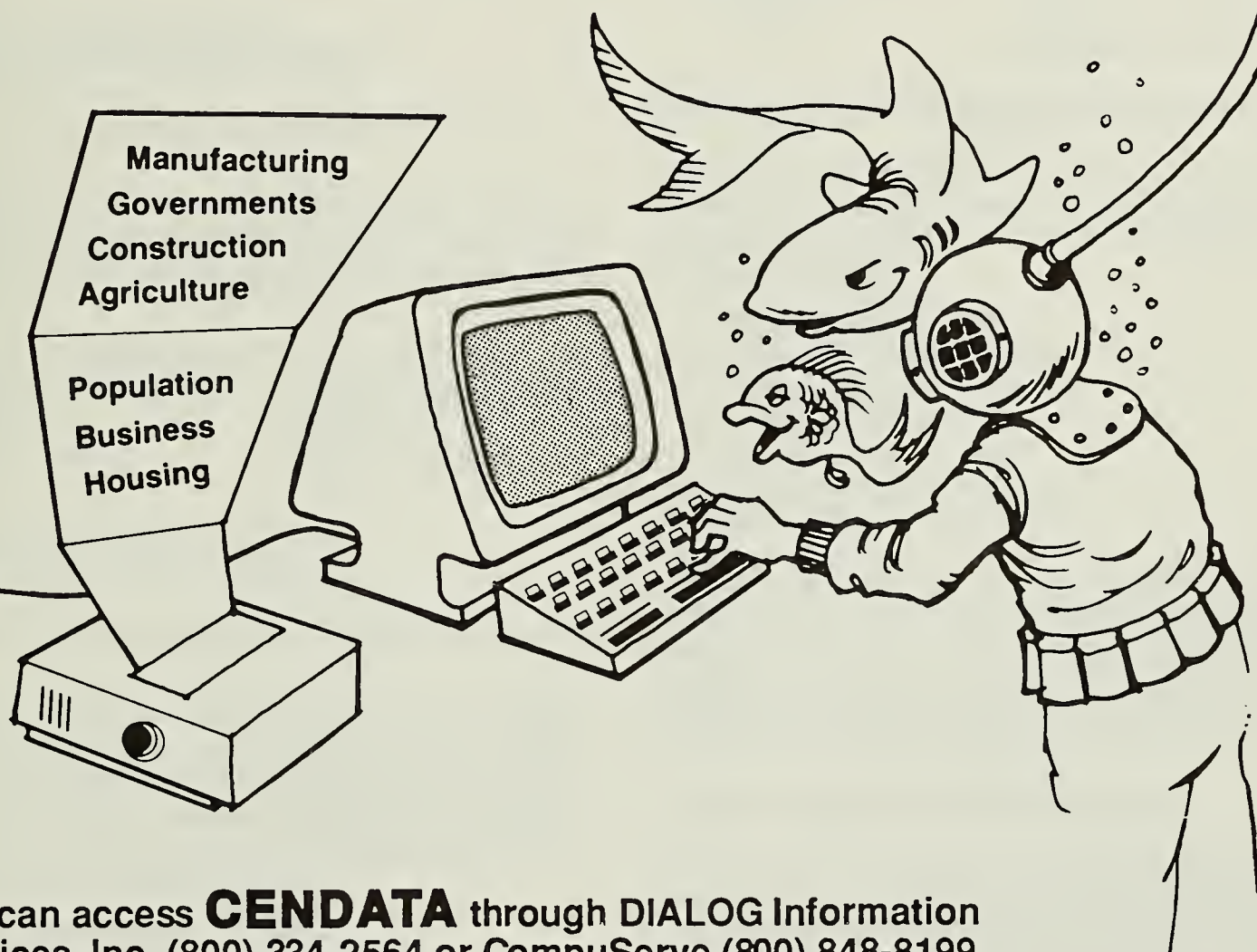


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# WENT'S WORK BOOK

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# PUBLICATION PROGRAM

## 1987 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)
- Land developers and subdividers

Data products in the Census of Construction Industries are issued in 4 publication series and in 3 other media:

- Printed reports [P]
- CD-ROM [C]
- Computer tape [T]
- Highlights online [+]

### Preliminary Industry Series (CC87-I-1(P) through CC87-I-28(P))

(Available November 1988 through May 1989) [P]

Twenty-seven separate industry reports and a United States summary report, providing national statistics for establishments with payroll. Statistics shown for 1987 include:

- Number of establishments
- Number of employees
- Payroll
- Hours worked
- Value of construction work done, by type of structure
- Selected operating costs

### Final Industry Series (CC87-I-1 through CC87-I-28)

(Available June 1989 through November 1989) [P] [C] [T] [+]

Twenty-seven separate industry reports and a United States summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

## Geographic Area Series (CC87-A-1 through CC87-A-10)

(Available January 1990 through March 1990) [P] [C] [T] [+]

Nine reports on the construction industries, representing each census geographic division, and a United States summary report. Regional reports provide detailed data for States and metropolitan statistical areas.

## Subject Report—Legal Form of Organization and Type of Operation (CC87-S-1)

(Available May 1990) [P]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

## OTHER ECONOMIC CENSUSES REPORTS

The Census of Construction Industries is part of the 1987 Economic Censuses. These are conducted at five-year intervals in years ending in 2 and 7 and consist of seven separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Transportation
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction

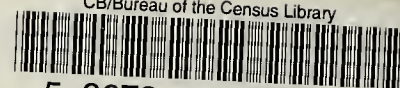
...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the Census of Outlying Areas, including separate economic censuses of Puerto Rico and other outlying areas. The Census of Agriculture and Census of Governments are conducted separately.

## HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, DC 20233. If you have any questions, call Census Customer Services 1-(301)-763-4100.



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